

# **National Bank of the Republic of North Macedonia**



## **Annual Report for 2019**

Skopje, April 2020

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## Governor's foreword

Dear readers,

**In this foreword, we should briefly refer to some of the key project activities in the National Bank, which took place in the previous year in order to strengthen our institutional capacity. But, from the very beginning, I cannot help but say that this retrospective is done at a time when the whole world is facing one of the biggest and most severe crisis** - the Covid-19 pandemic, which threatens global health and completely changes the way we have lived until recently. Of course, it is of primary importance in such a crisis to take all the necessary measures to deal with it, protect the health and save human lives. But, it is inevitable that such a context will have economic consequences, which according to the current views in 2020 will be reflected in the decline of the global economy, the largest since the period of the global depression.

**It is more than clear that in such circumstances, policy makers in all countries and international financial institutions take coordinated actions and measures to support the economy for making it easier to overcome the consequences from the corona crisis. The National Bank is no exception.** In a very short period of time, we have taken a series of measures in the field of monetary policy and we have made regulatory changes which should ease the burden from this extremely complex and uncertain global crisis.

**Similar to the crisis episodes in the past, this global crisis also shows that for a quick and effective response, it is inevitable to constantly invest in the institutional capacity, run prudent policies and create space that can be used when needed for coping with the shocks.** I am proud to say that we meet these criteria. Last year, we successfully achieved our goal of maintaining price stability by maintaining a stable Denar exchange rate against the euro and ensured further strengthening of the financial stability in the economy. In doing so, we not only pursued an adjustable monetary policy, but also undertook a series of activities aimed at improving the overall environment. At the same time, we have been constantly working on strengthening our institutional capacity. In this context, I consider it appropriate to address several important project activities from 2019.

**Last year we paid great attention to the activities aimed at deepening the cooperation between the financial regulators and strengthening the exchange of information in order to formalize the macroprudential framework.** It is clear that financial stability is a necessity for a healthy economy and greater resilience and coping with shocks. Therefore, together with other financial regulators, we prepared a new memorandum of cooperation in maintaining financial stability, in accordance with the recommendations of the International Monetary Fund and the World Bank, which we concluded this year. Thus significantly changing the composition and work of the Financial Stability Committee, which now includes all the regulators and which operationalize the cooperation and analytical infrastructure for identifying systemic risks, taking macroprudential measures and crisis management.

**In order to further strengthen the financial stability and improve the environment for conducting monetary policy, we especially advocated for the implementation of the Denarization Strategy and the Strategy for Non-performing Loans,** which were adopted at the end of 2018. Also, last year we made endeavors to improve the systemic analyses to support financial stability, by expanding the indicators that monitor

the risks in the banking system, as well as by frequent monitoring of the developments in other financial institutions.

**Providing timely, consistent and quality official statistical data, on which policies are based is an ongoing challenge for us and is part of our mission.** Our endeavors in this area have been affirmed by the accession of our country to the highest statistical data dissemination standard – IMF SDDS Plus, thus becoming the eighteenth country in the world that meets this standard. Then, with the support of the European Union we established the new statistical web portal NBStat. Thus, our central bank already offers a modern statistical tool, through which our statistical data are available in a simple, fast and detailed way through our modern digital channels.

**In the past several year, technological innovations in providing financial services took a big swing, providing higher quality, faster and more efficient services, but also imposing certain challenges for regulators.** Aware of these changes and following the experiences of other countries, last year we opened the **Innovation Gateway - a platform of communication with the fintech sector**, thus beginning to strongly encourage the development of innovation in the field of financial services and products. Through this platform we are open to all questions, dilemmas and proposals related to the regulation that affects the fintech sector. This way we support and encourage the process of financial innovation, but at the same time taking care not to disrupt the integrity of the financial sector and not taking excessive risks. This balance between opportunities and risks will be the basis of the national Strategy for the application of financial technologies, which we will work on this year.

**Financial innovations are especially present in the field of payment services, and last year we were committed to the new legal framework for payment infrastructure.** In cooperation with the Ministry of Finance, we were actively involved in the drafting of a new payment services and payment systems regulation, which will be largely harmonized with the legislation of the European Union and with the standards and rules for making payments in the European countries. We expect that the regulation, which includes a new Law on Payment Services and Payment Systems and relevant bylaws, in the medium run, during the next few years will contribute to strengthening the market mechanism and intensifying competition and the volume of the supply in the provision of payment services.

**These legal changes will provide more mechanisms for institutional consumer protection, as well as a new function in the perimeter of the functions of the central banks.** In order to protect the consumers, bylaws were amended last year, in order to more specifically define the scope of the annual rate of total costs of consumer loans. In addition to this, this year we plan to take activities to improve our position as a central bank in this area.

**The way the world functions during the pandemic of Covid-19, once again points to the important role of e-commerce, which is certain to be even more important to economic flows in the future.** Facilitating this process, last year we liberalized the opening and holding user accounts with the electronic payment transaction services thus enabling these accounts to be used solely for commercial purposes, i.e. for on-line purchase and/or sale of goods and services. This created conditions for greater availability of goods and services offered by our residents through e-commerce in the international market.

**Last year we continued to actively work in the field of financial education, recognizing the need of a financially educated population, which understands the benefits of using different financial products, but also knows how to protect itself from**

**potential risks.** Therefore, we paid more attention to the adult population. Following the central banking trends, we used different channels of communication and a diverse approach in developing topics in the field of economy and finances, in order to get closer to the population of different age groups. It is of a particular importance that in addition of financial education, activities to encourage financial inclusion are formally included in our agenda. A new memorandum of cooperation was signed in this field between the regulators of the financial system, and we were already actively working of the first national Strategy for financial education and financial inclusion, which will be adopted in cooperation with other financial regulators.

The process of European integrations is our strategic goal, with our continuous efforts as a central bank to get closer towards the standards of the European System of Central Banks being in the same context. The twinning project "Strengthening the institutional capacity of the National Bank in the process of its accession in the European System of Central Banks" which started in the second half of the last year leads precisely in this direction. It provides support in our continued compliance with the regulation, policies and standards of the European System of Central Banks, especially in the field of payment services, statistics, supervision and research, as key components of the project program. In addition, for an enhanced coordination in the field of European integration activities, the Committee of European Integrations was formed at the National Bank at the end of the year. All this is extremely important, especially now, when another important step of our country towards the European Union has already been made.

**Last but not least - in 2019, we also worked on improving our communication with the public, which is actually a part of the central banks' toolkit.** In doing so, not only we increased the volume of communication, but also worked to increase the quality, especially to improve the comprehensibility of the press releases and the scope of information they contain, as well as the use of modern channels for immediate communication with the public. Public relations, among other things, help us as central banks to influence the economic agents' expectations and behavior, and be transparent, which is especially important because the central bank independence goes hand in hand with accountability. After all, transparency and accountability are the fundamental principles underlying our operations - they guarantee the confidence and integrity of the National Bank. It is no news that whenever economies face a shock, the public perception of the central bank's messages and views is extremely important, which requires a high degree of confidence.

**Although with this foreword we briefly referred to the past year, our eyes are inevitably turned to the future, which unfortunately at the moment is burdened with uncertainty and concern for the greatest wealth we have, health.** We, as a central bank, will continue to be consistent in conducting optimal policy to mitigate the economic consequences from this corona crisis. We see the optimality in the balance between the support measures and simultaneous preservation of the public good that we have maintained for years - price stability, domestic currency stability and financial stability. We have constantly achieved these goals, even in the past few episodes of crisis. Given the capacity we have and we are constantly upgrading as a central bank, as well as our current integrity and credibility, without any restraints we will continue to be consistent in meeting our goals.

28 April 2020  
Skopje

Governor  
and Chairman of the Council National Bank  
Anita Angelovska Bezhoska

## Macroeconomic overview in 2019

**The growth of the global economy slowed down in 2019, amid pronounced global uncertainty caused by the current trade tensions between the USA and China, uncertainty regarding the Brexit process, geopolitical tensions in the Middle East, as well as factors specific to certain economies and industries.** The latter is particularly true for the German economy, whose growth has slowed down due to the weaker performances in the automotive industry. The slowdown in the German economy was assessed as temporary, conditioned by the need to gradually adapt the automotive industry with the higher requirements related to the environmental standards. However, given its importance as one of the drivers of the European economy, this situation introduced additional uncertainty, including for countries with significant trade with this country, such as the Macedonian. By the end of 2019, the downward risks regarding the global growth were assessed as lower, amid expectations of a positive effect from the relaxed monetary policy in the developed countries, the signing of the first phase of the agreement between USA and China in December, as well as the reduced uncertainty regarding Brexit without an agreement. However, the risks remain, and the negative effects from the new viral infection in China emerged as a new threat to public health and global economy.

**Despite the uncertain global environment, the growth of the Macedonian economy in 2019 accelerated and reached 3.6%, compared to 2.7% in the previous year.** In terms of the sources of growth, this year was characterized by the recovery of the investment activity, after two years of decline, which was an important driver of the growth. The indicative indicators show that the same was supported by both public and private investments, amid a stable environment and relaxation of the conditions of financing. The growth of private consumption continued during this year, supported by the favorable expectations, growth of wages and employment, as well as further credit support from banks. Although exports in 2019 had the highest positive contribution on an individual basis, driven by the new and part of the traditional export facilities, with more pronounced import pressures, net exports had a negative contribution. In 2019, inflation remained low, with an average inflation rate slowing down to 0.8% compared to 1.5% in 2018. The slowdown is a reflection of the changes in the global markets of primary energy products and their indirect effects on other prices. The core inflation (excluding food and energy) also decelerated, mainly due to the falling prices of some transport services. The output gap was slightly positive, indicating absence of price pressures from the growth of the domestic demand.

**The shifts in the labor marked in 2019 remained favorable, with further reduction of the unemployment rate, which was reduced to the historically lowest level of 17.3%** (annual decline of 3.5 percentage points). Nominal net and gross wages registered an annual growth of 3.9% and 5.1%, respectively. The growth partly reflects the increase in minimum net wage, increase in public sector wages, as well as the effect of the contributions subsidizing measure due to the wage increase. During the year, labor productivity decreased by 1.9% (decline of 0.9% in 2018), amid higher employment growth compared to the value added growth. In line with the wage growth and declining productivity, labor unit costs in 2019 were higher by 8% annually.

**In 2019, the National Bank continued to ease the monetary policy, reducing the key interest rate from 2.5% to 2.25% in March.** The monetary easing was a reflection of the solid external position of the economy, favorable developments in the foreign exchange market, as well as stable expectations of domestic agents, amid solid growth of total deposits and low and stable inflation rate. During the year, the movements in the foreign

exchange market were favorable, with the interventions of the National Bank aimed at the purchase of foreign currencies, contributing to further growth of foreign reserves and their maintenance in a comfort zone, which is of particular importance in terms of a Strategy for a stable foreign exchange rate. The goals of the monetary policy were achieved, which is seen through the further maintenance of price and exchange rate stability.

**Amid favorable movements in the economy and stable expectations, total deposits in 2019 registered an annual growth of 9%.** Deposits growth is largely due to denar deposits, so the degree of the euroization of deposits continued to decline, after the stagnation in the previous two years. Solid solvency and liquidity position of banks, growth of funding sources, increased competition in the banking sector, stable environment and changes in the monetary policy are contributing factors for banks to continue increasing loan supply. Thus, lending continued to grow, reaching a solid annual growth of 7.6% (excluding write-offs)<sup>1</sup>. Household loans continue to have the largest contribution in the credit growth, amid positive contribution of corporate loans. The level of non-performing loans of banks remained at around 5%.

**In 2019, the current account deficit remained expanded by 2.6 percentage points to 2.8% of GDP, still remaining moderate without any indications of larger external sector imbalances.** The deepening in the current account balance is mostly due to the widening of the trade deficit, achieved in conditions of accelerated growth of imports compared to the growth of exports of goods and reduced surplus in the balance of services. Secondary income registered a deterioration mainly due to the lower net inflows in the government, amid moderate growth of private transfers, while the deficit in primary income is almost unchanged compared to 2018. The growth of the export of goods still arises from the new companies with foreign capital, amid positive contribution from some traditional activities, while the growth in imports was mainly conditioned by the import of goods for the needs of the export.

**In 2019, the financial account registered net inflows of 5.4% of GDP.** The positive net flows were achieved on the basis of trade credits, direct investments and loans, which were only partially offset by net outflows on the basis of portfolio investments and currencies and deposits. Foreign direct investments in 2019 were 2.6% of GDP, which although an annual decline of 3 percentage points of GDP, it is still at the level of historical level of 2010 onwards, with the exception of 2018 when an above average of 5.6% of GDP were registered (partially due to the one-time factors). In terms of structure, it is noteworthy that equity capital registers a growth, as opposed to the increased outflows based on intercompany lending and reduced reinvestment of earnings. The gross external debt at the end of 2019 was 72.2% of GDP and registered a decline of 1.1 percentage points of GDP on an annual basis, amid decline of public debt (by 1.3 percentage points of GDP) and minor growth of private sector debt (by 0.2 percentage points). Most external debt indicators of the domestic economy, including solvency and liquidity indicators in the payments abroad continue to be in the safe zone. Also, the relative share of almost 40% on intercompany lending and trade credits, as more flexible and less risky debt form, point to a solid structure of the external debt. Given such developments in the current transactions and financial account, at the end of 2019, the gross foreign reserves registered a growth and were maintained at a solid level, providing coverage of over four months of import of goods and services in the next year.

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<sup>1</sup> The application of the new Decision on the methodology for credit risk management started in July 2019, according to which banks were obligated to transfer from balance sheet to off-balance sheet records (and continue to transfer) all claims which were fully provisioned for longer than a year, thus retaining the right for their collection.

In terms of the expectations for the upcoming period, the macroeconomic forecasts of the National Banks from October 2019 point to a stable and relatively favorable macroeconomic environment in the period of 2020-2022. **However, the developments of the end of 2019 and the beginning of 2020 related to the spread of the new viral infection worldwide were inevitably reflected on the developments and expectations for the global economy in 2020.** Amid a significantly less favorable external environment, as well as the introduction of preventive measures to prevent the spread of the virus and preserving public health in the country, a greater deviation from the October estimates in all segments of the economy is expected. However, they are not caused by the shifts in the economic fundamentals and for now are expected to be of short-term, temporary nature, which would be followed by the normalization of global trends and movements in the domestic economy.

## Key economic indicators

annual changes, in %	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Real sector</b>												
Gross domestic product *	5.5	-0.4	3.4	2.3	-0.5	2.9	3.6	3.9	2.8	1.1	2.7	3.6
Inflation	8.3	-0.8	1.6	3.9	3.3	2.8	-0.3	-0.3	-0.2	1.4	1.5	0.8
Unemployment rate	33.8	32.2	32.1	31.4	31.0	29.0	28.0	26.1	23.7	22.4	20.7	17.3
<b>External sector</b>												
Current account balance (% of GDP)	-12.7	-6.8	-2.0	-2.5	-3.2	-1.6	-0.5	-2.0	-2.9	-1.0	-0.1	-2.8
Trade balance (% of GDP)	-28.6	-25.8	-21.6	-25.2	-26.5	-22.9	-21.7	-20.1	-18.8	-17.8	-16.2	-17.3
Foreign direct investments (% of GDP)	6.0	2.0	2.2	4.6	1.7	2.8	2.3	2.2	3.3	1.8	5.6	2.6
Gross external debt (% of GDP)	48.8	55.9	57.8	61.2	66.1	64.0	70.0	69.3	74.7	73.4	73.3	72.2
Gross foreign exchange reserves (in EUR million)	1,494.9	1,597.5	1,714.5	2,068.9	2,193.3	1,993.0	2,436.5	2,261.8	2,613.4	2,336.3	2,867.1	3,262.6
<b>Monetary sector</b>												
Money supply (M4)	11.8	5.7	12.1	9.5	4.4	5.2	10.6	6.9	6.2	5.1	11.8	9.3
Total credits	34.4	5.2	7.0	8.4	5.6	6.6	10.0	9.6	6,5**	5.4	7.3	7,6**
Total deposits (including transaction deposits)	13.3	7.0	12.8	9.1	4.4	5.4	10.5	6.4	6.1	5.0	12.1	9.0
<b>Fiscal sector</b>												
Budget 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	-2.0
Public debt (% of GDP)	23.0	26.2	27.2	32.0	38.3	40.3	45.8	46.6	48.8	47.7	48.6	48.9
<b>Banking sector</b>												
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	16.3
Non-performing loans of the non-financial sector / Gross loans (%)	6.8	9.1	9.3	9.9	10.5	11.5	11.3	10.8	6.6	6.3	5.2	4.8
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	26.9

Source: NBRNM, SSO, Ministry of Finance.

\*Preliminary data for 2018, estimate for 2019.

\*\* Corrected for the write-offs.

# I. Monetary Policy in 2019

## 1.1. Monetary policy objectives

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

Starting from these legal provisions, the National Bank in the course of 2019 adjusted the monetary policy in order to successfully achieve the legally defined goals. The goals of the monetary policy were achieved successfully, which is seen through the further maintenance of price and exchange rate stability. Foreign reserves registered a growth and according to all adequacy indicators were maintained in the safe zone. In terms of price stability, a minor annual growth of domestic prices was registered in 2019, amid downward shifts of energy prices, as well as more moderate growth of the core and food component of inflation. In 2019, the financial stability was successfully preserved in support of the achievement of the primary goal. During 2019, the National Bank continued to conduct an adjustable monetary policy, in conditions of a favorable macroeconomic environment.

Chart 1  
Output gap and inflation\*

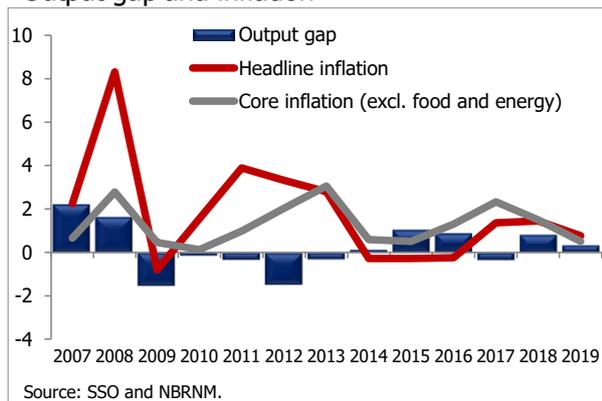
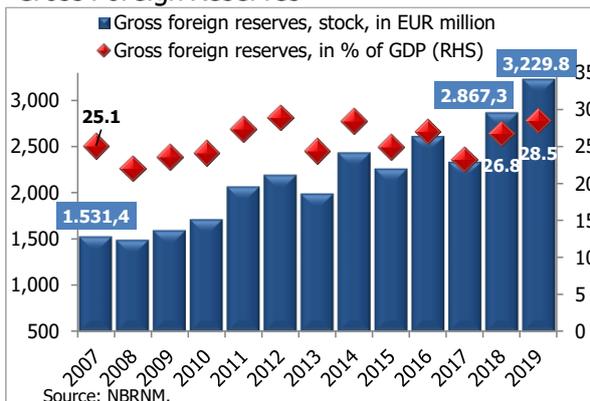
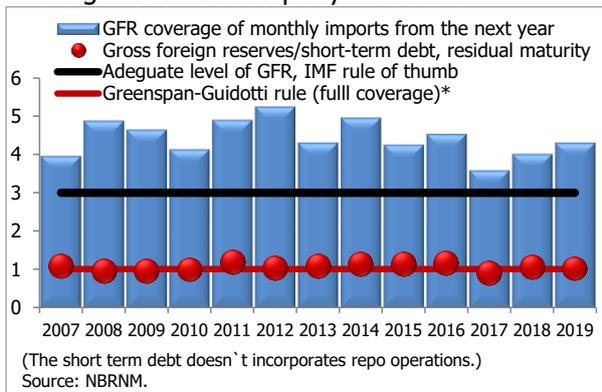


Chart 2  
Gross Foreign Reserves

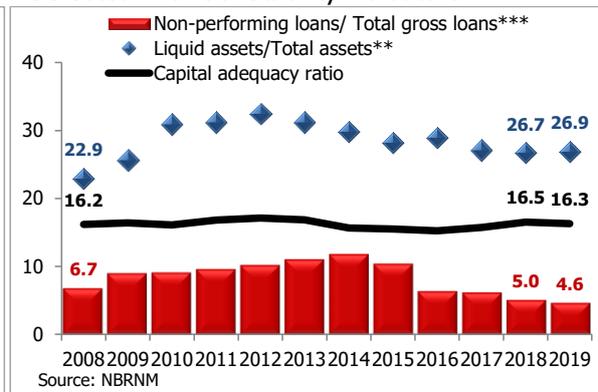


\*Productivity gap is an indicator of the cyclical position of the economy and it is calculated as the deviation of the actual from the potential level of GDP relative to the potential level of GDP (output gap = (actual GDP - potential GDP)/potential GDP). Annual average growth of headline and core inflation.

**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 relates to loans to the financial and non-financial sector.

Source: NBRNM and SSO.

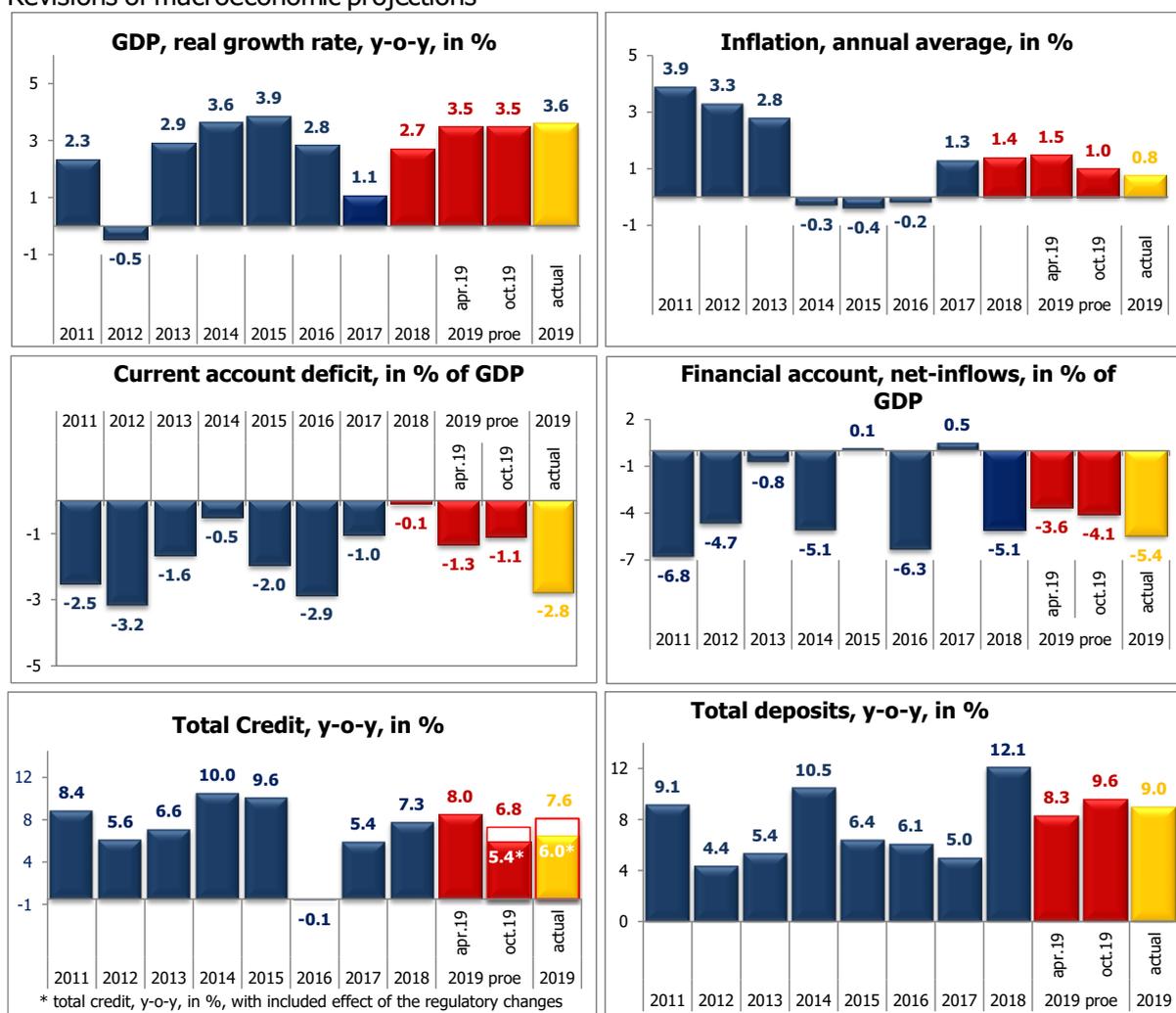
## 1.2. Monetary policy setup

*In 2019, the National Bank continued to ease the monetary policy, reducing the key interest rate from 2.5% to 2.25% in March. The monetary easing was a reflection of the solid external position of the economy, favorable developments in the foreign exchange market, as well as stable expectations of domestic agents, amid solid growth of total deposits and low and stable inflation rate. In such circumstances, during the year, the movements on the foreign exchange market were favorable and enabled further interventions with purchase of foreign currencies and growth of foreign reserves.*

The environment for conducting monetary policy in 2019 was favorable compared to the previous year, amid present but less expressed risks in the domestic environment. Movements were favorable in the foreign exchange market, which enabled interventions with purchase with currencies by the National Bank, which was the highest in the last ten years. Household savings continue to growth, as well as their propensity for savings in the domestic currency, which indicates stable expectations and increased confidence of economic agents. The disciplined fiscal policy also contributed to favorable environment, given the low budget deficit in 2019. Despite the reduction of the risks from the domestic environment, in 2019, there still was uncertainty and variability in the movement of the external environment, which required the need for caution in conducting the monetary policy.

The stable domestic environment and absence of inflation pressures created a favorable environment in the domestic economy for achieving solid economic growth. In such environment, during 2019, an economic growth of 3.6% was registered, which is in line with the expectations and supported by the growth of the export activity, and the domestic demand also.

Chart 5  
Revisions of macroeconomic projections



On 9 August 2018, the National Bank Council adopted the Decision on the methodology for credit risk management that requires from banks to transfer, from the on-balance sheet to the off-balance sheet records (and to continue to transfer), all claims that have been fully booked for more than one year. The implementation of the Decision started from July 2019. Notwithstanding the transfer of these claims to the off-balance sheet record, the banks reserve the right for collection. Source: NBRNM and SSO. Forecasts for all indicators refer to the macroeconomic forecasts of the NBRNM.

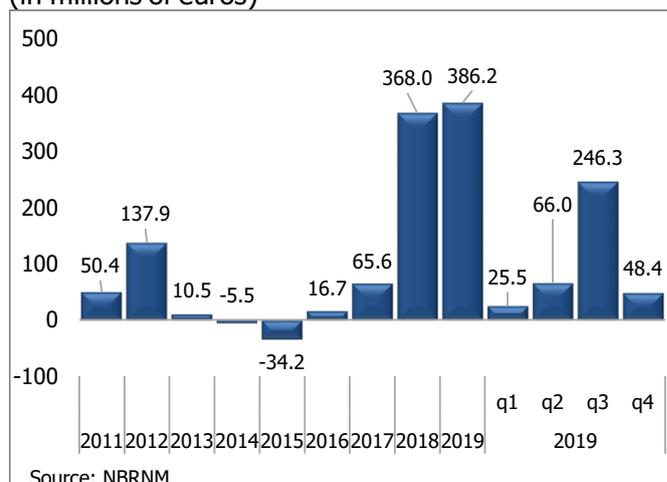
The general price level in 2019 registered an annual average growth of 0.8%, which is mostly due to the growth of food prices, and less to the core inflation amid negative contribution of energy prices. During the year, the National Bank conducted significant revisions in the inflation forecasts and performances are mainly within the forecasts.

Foreign reserves continue to grow in 2019, being maintained in the safe zone throughout the year. Analyzed by factor, the increase in the foreign reserves mostly arises from the significant National Bank purchase of foreign currency on the foreign exchange market, while the transactions on behalf of the government contributed to reducing foreign reserves. In 2019, significant net inflows were registered in the financial account of the balance of payments, which enabled full financing of the current account deficit and additional growth of foreign reserves.

Amid stable expectations and more favorable perceptions of risk among economic agents, favorable developments were also observed in the savings of the private sector. Thus, in 2019, total deposits registered a growth, which in terms of currency was mostly due to the

growth of denar deposits (including demand deposits). In terms of the division of short-term (excluding demand deposits) and long-term deposits, the increase of long-term deposits is higher. As a result of the stable expectations of the entities, the degree of euroization<sup>2</sup> continues to decrease during 2019. In terms of sector, household deposits continue to be the main driver of the growth of deposits, amid significant increase in the contribution of corporate deposits in the growth of total deposits.

Chart 6  
NBRNM interventions on the foreign exchange market  
(in millions of euros)



Source: NBRNM  
Source: NBRNM

Solid solvency and liquidity position of banks, growth of funding sources, increased competition in the banking sector, stable environment and changes to the monetary policy are factors that make banks continue increasing loan supply. Thus, lending continues to grow, reaching a solid annual growth at the end of the year. Household loans continue to be the sector with the largest contribution in the credit growth, amid positive contribution of corporate loans.

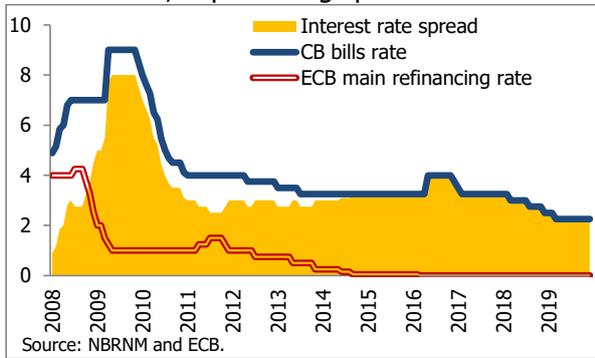
Given the application of fixed nominal exchange rate of the denar against the euro, changes in interest rates in the euro area, as the anchor

economy, play an important role in the monetary policy setup in the country. During 2019, the European Central Bank (ECB) continued to pursue an adjustable monetary policy, thus reactivating the quantitative easing program. At the same time, the ECB reduced the interest rate on overnight deposits from -0.4% to -0.5%, while the remaining interest rates, including the key interest rate remained unchanged during the year. As a result of the reduction of the key interest rate of the National Bank to 2.25%<sup>3</sup>, the spread between the interest rates of the National bank and the ECB narrowed from 2.5 percentage points to 2.25 percentage points. Regarding interest rates of the banks in the domestic economy, the spread between interest rates on denar deposits and interest rates on foreign currency deposits in 2019 registered a minor decrease (from 1.2 percentage points to 1.0 percentage points), amid larger downward shift in the interest rate of denar deposits in terms of currency.

<sup>2</sup> Foreign currency deposits to total financial system deposits

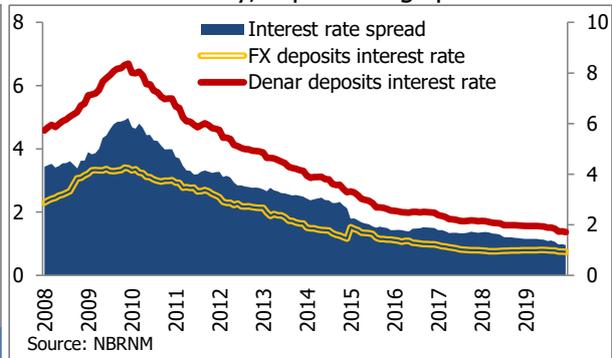
<sup>3</sup> During the first quarter of 2020, the National Bank reduced the key interest rate twice, bringing it down to 1.75%.

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



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

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



## II. International environment<sup>4</sup>

The trend of slowing economic growth in 2018 continued in 2019. The estimated growth in 2019 was reduced to 2.9% (3.6% in 2018) and it's the lowest after the global crisis from 2008-2009. The continuing and increased uncertainty over trade tensions between USA and China, uncertainty regarding Brexit, geopolitical tensions in the Middle East and financial instability in part of the emerging countries, despite more favorable conditions and adjustable monetary policy in developed countries, led to slower global trade growth and slower global economic growth. Thus, the deceleration is relatively synchronized and is present in the developed countries and emerging countries. Within the developed countries, the euro area registered a growth of 1.2% (1.9% in 2018), with solid domestic demand and a negative contribution of net exports, amid decline of the processing industry<sup>5</sup>, especially in the automotive industry in Germany. Under the influence of weaker exports and investments, the growth of the US economy also decelerated to 2.3% (2.9% in 2018), and resulted mainly from household consumption, amid solid performance in the labor market. On the other hand, the United Kingdom registered a growth of 1.4% in 2019 (1.3% in 2018), as a reflection of the increased household and government consumption, and moderate growth of 0.7% was registered in the Japanese economy (0.3% in 201), where the positive effect from the fiscal stimulus exceeded the negative contribution of net exports.

The downward risks regarding the global growth were estimated as lower by the end of 2019. This was mainly related to the stabilization of the growth in the production sector and global trade, expectations for a positive effect from the relaxed monetary policy, the signing of the first phase of the agreement between USA and China (on 15 December 2019), as well as reduced uncertainty regarding Brexit without an agreement following the early elections in December in the United Kingdom. However, the risks remain downward and are related to the increased geopolitical tensions, re-escalation of the trade tensions, which may lead to weaker than expected performances in the global economic activity, potential deterioration of the global financial conditions and increased financial vulnerability in the emerging countries, as well the negative effects from the new viral infection in China.

The average annual global inflation rate in 2019 slowed down to 3.4% (3.6% in 2018) and is mostly as a reflection of the deceleration of the economic activity and the decline of the oil price in the second half of 2019. By group of countries, the inflation rate in the developed countries was reduced to 1.4% in 2019 (2% in 2018). Contrary to this, in the emerging economies, the inflation registered a moderate acceleration and the annual rate reached 5.1% (4.8% in 2018).

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<sup>4</sup> The analysis is based on the IMF's 'World Economic Outlook, updated in October 2018 and January 2019; the World Bank's World Economic Outlook, January 2018; the quarterly reports of the National Bank.

<sup>5</sup>The decline in the added value of the processing industry in 2019 in the euro area equals to 1.1%, and 3.5% in Germany.

Chart 9  
Global economic growth (in %)

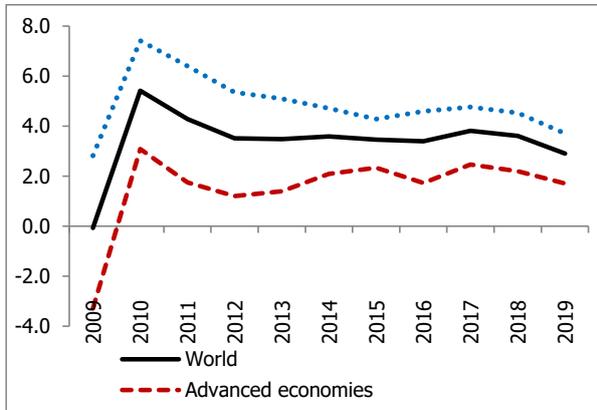


Chart 10  
GDP growth in developed countries (in %)

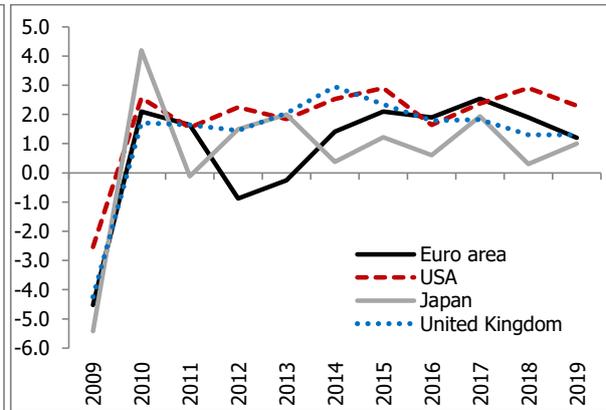
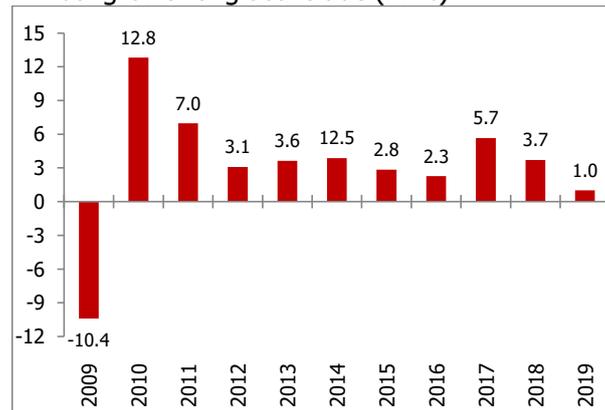


Chart 11  
Annual growth of global trade (in %)



Source: World Economic Outlook, October 2019 and update January 2020, IMF

Analyzing specific quantitative indicators that depict the external environment of the Macedonian economy, foreign effective demand and foreign effective inflation in 2019 also decelerated. Namely, it is estimated that the foreign demand increased by 1.4% (1.9% in 2018), amid moderately lower growth compared to 2018 in most countries. Thus, Germany, Bulgaria and Serbia have the largest contribution in the estimated growth. Foreign effective prices in 2019, on an average, registered a growth of 1.5% (2.2% in 2018), amid a deceleration in the inflation in almost all countries, except in Bulgaria which registers an acceleration in inflation. Thus, the growth of prices in Germany, Bulgaria and Serbia<sup>6</sup> had the largest contribution to the growth of prices, while the remaining countries had a more moderate positive contribution.

<sup>6</sup> Inflation in Serbia has been adjusted for changes in the exchange rate.

Chart 12  
Foreign effective demand

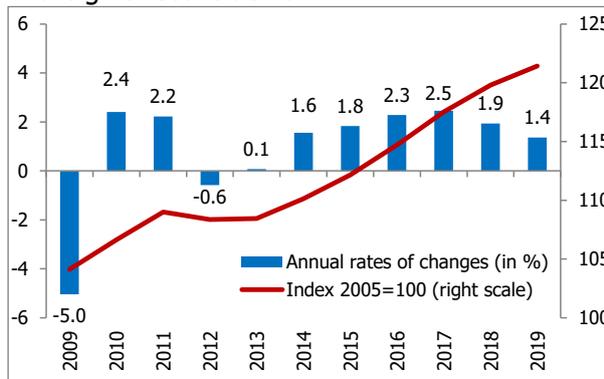
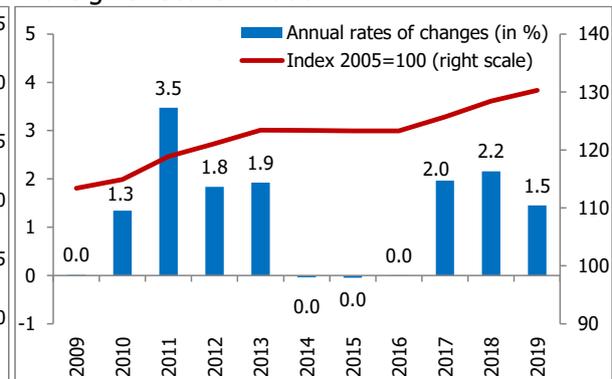


Chart 13  
Foreign effective inflation



Source: National statistical offices and National Bank calculations<sup>7</sup>.

The primary commodity markets in 2019 registered downward trend in the energy prices, amid increase in prices of metals and food commodities. Namely, the average oil price in 2019 amounted to EUR 57.2 per barrel and was lower by 5% compared to the average price in 2018 (EUR 60.2 per barrel). By dynamic, under the influence of the geopolitical tensions between the USA and Iran and reduced supply pursuant to the agreement between OPEC+ countries, the oil price registers a growth in the first half of the year, followed by a strong downward adjustment. The decline is linked with the heightened trade tensions between the US and China and deceleration of the global oil demand, as well as increased oil production in USA. In 2019, food prices registered a moderate growth of 2.7%. Namely, the price index of basic metals increased by 9.4% and had an upward trend in the first nine months, primarily due to the growth of the prices of metal ores and nickel, amid solid demand and reduced supply, while it slowed in the last quarter.

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

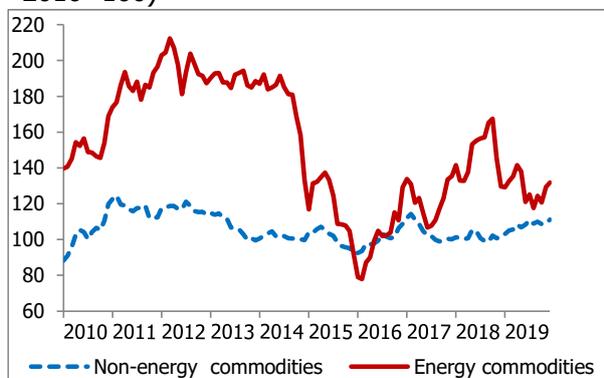
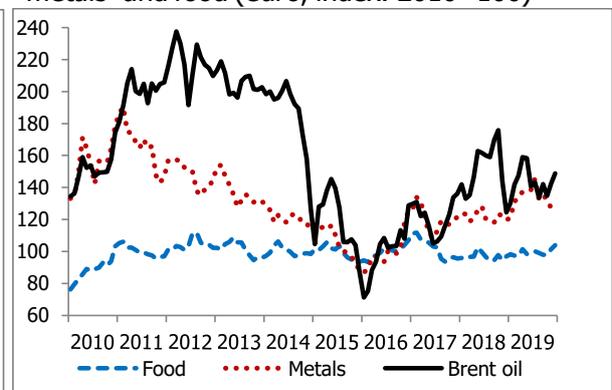


Chart 15  
Monthly movement of prices of crude oil, metals<sup>8</sup> and food (euro, index: 2010=100)



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

In 2019, the central banks of the developed countries conducted mainly stimulating monetary policies, especially in the second half of the year. Thus, after the gradual interest

<sup>7</sup> 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.

<sup>8</sup> Metals Price Index is a composite index, which includes prices of copper, aluminum, iron ore, tin, nickel, zinc, lead and uranium.

rate increase in the previous three years, the FED reduced the interest rate in July 2019, and further reduced it in September and October, bringing it down to interval from 1.5 to 1.75% (lower by 0.75 percentage points compared to the end of 2018). The relaxation of the monetary policy is due to the expectations for unfavorable effects from the deceleration of the global growth on the domestic economy and disinflationary pressures. The ECB also pursued stimulating monetary policy, extending the period of low interest rates twice in the first half of the year, and in March announced measure for long-term refinancing operations, which began in September 2019 and will last for three years (as opposed to the initially planned two years). Already in September 2019, the ECB reduced the deposit interest rate by 10 basis points, to -0.5%, emphasizing that the interest rates will be maintained at the current or lower level until inflation comes close to, yet below 2% for the forecast horizon. In addition to this, a package of measures was announced including: resumption of the program for quantitative easing with a monthly purchase of securities in the amount of EUR 20 billion, which started in November 2019 and will last until the process of interest rates increase starts; changes in the modalities and duration of the new measure for long-term refinancing operations; including two-tier system for reserves requirement. Bank of England and Bank of Japan did not shift the monetary policy setup, keeping the policy rates at 0.75% and -0.1, respectively.

### III. Macroeconomic developments in 2019

#### 3.1. GDP and inflation

According to the estimated data of the SSO, in 2019 there was an acceleration of the domestic economic activity, which achieved a real growth rate of 3.6%<sup>9</sup> (2.7% in 2018). Such a growth is a reflection of the stable domestic environment, stable expectations and confidence of economic agents, favorable performances in the export sector, as well as further favorable developments of the labor market and the implementation of the major public infrastructure projects.

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

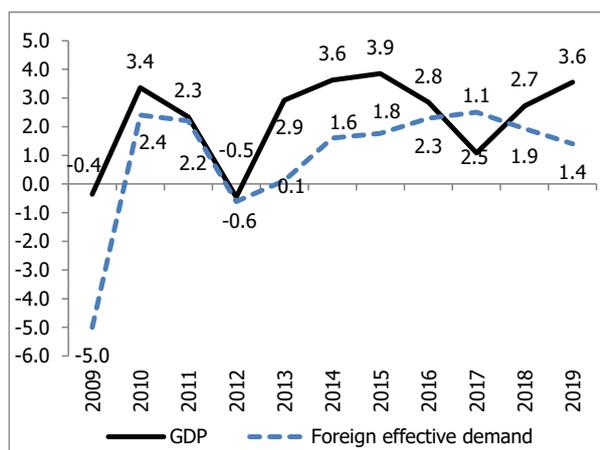
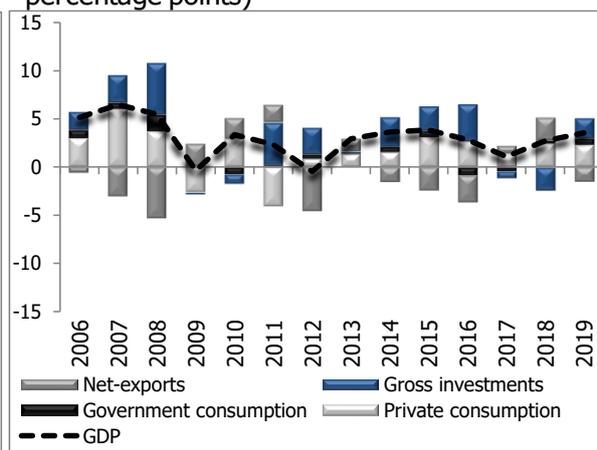


Chart 17  
GDP (real growth, in %) and GDP expenditure components (contributions to growth, in percentage points)



Source: State Statistical Office and Eurostat, NBRM calculations. GDP data for 2018 are preliminary, and data for 2019 are estimated.

On the production side, during the 2019, the majority of activities have registered a real growth of value added and consequently positive contributions in the total GDP growth. Thus, as in the last several years, trade, transport and catering activities have the highest positive contribution to the economic growth for 2019. Also, similar to last year, industry has a positive contribution, where real value added growth of 3.1% was registered. Analyzed granularly through the industrial output index, the growth of industry is mainly due to the favorable performances in the processing industry related to the production in the activities where the largest export facilities with foreign capital are present, and energy sector also has a significant contribution. Furthermore, the construction sector registered a solid rate of real annual growth in 2019 and consequently positive contribution to the GDP growth, which is an improvement compared the unfavorable performances and the decline in the activity of this sector during 2018. The improvements in the construction sector are related with the growth in the field of civil engineering related to the further implementation of the major public infrastructure projects, and a significant contribution is also registered in the construction of buildings. Agriculture also has a positive contribution in the total economic growth, although the value added in this sector decelerates compared to the growth in 2018. In most of the

<sup>9</sup> In 2019, real GDP was as follows: Q1: 3.8%, Q2: 3.4%, Q3: 3.6% and Q4 3.4%.

remaining activities from the service sector, there is a real growth of added value and hence a positive contribution to the total GDP<sup>10</sup> growth.

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

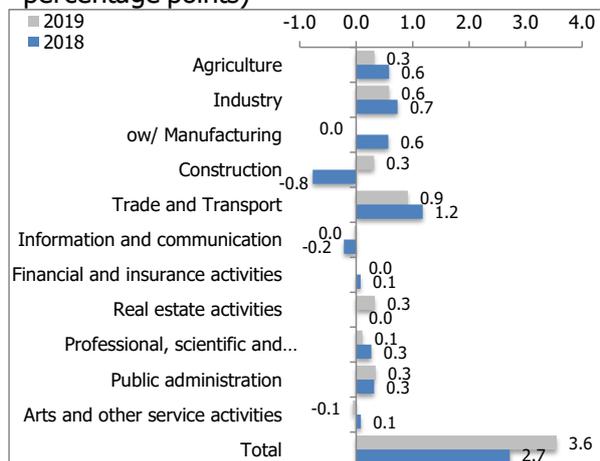
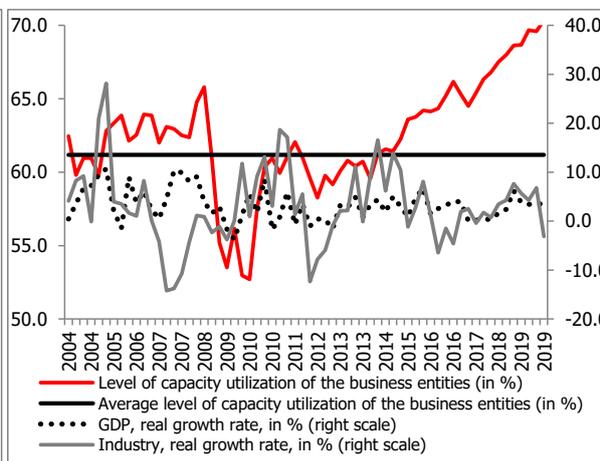


Chart 19  
GDP, industry and capacity utilization



Source: State Statistical Office and National Bank calculations GDP data for 2018 are preliminary, and data for 2019 are estimated.

In terms of aggregate demand, the growth of the domestic economy in 2019 arises from the domestic demand, while net exports, which had a positive contribution for the growth in the past two years, has a negative contribution in 2019. The growth of the domestic demand was supported by all its components. Thus, private consumption has a significant positive contribution, amid growth of disposable income, favorable developments on the labor market and increased credit support to the household sector. Investments in 2019 returned in the zone of positive achievements, after two years of decline, which was largely caused by the political uncertainty in that period and temporary halt in major public infrastructure investments. The growth of investments in 2019 is in line with the recorded growth in construction and increased import of investment products. Public consumption also had a positive contribution in the growth of the domestic economy<sup>11</sup>. Export of goods and services remains the category that conditions the growth, with the highest positive individual contribution, despite the fact that in 2019 there was an increase in the global uncertainty and deceleration of the growth in some of the key trading partners. The new export oriented facilities with foreign capital continue to contribute the most for such export achievements, and some of the traditional export sectors also have an additional contribution. The growth of exports and increased domestic demand led to the growth of import of goods and services, whereby net imports register a negative contribution to the change in the GDP.

In 2019, the inflation rate equaled 0.8%, which is a slowdown in price growth compared to 2018 (when inflation of 1.5% was recorded). The slowdown in domestic inflation is a reflection of the changes in the world markets of primary energy products and their indirect effects on other prices. Core inflation has also contributed to the slowdown in average price growth, mainly due to falling prices for some transport services. Analyzed by dynamics, the growth of consumer prices has been decelerating constantly, from 1.2% in the first quarter

<sup>10</sup> Thus, within the service sector in 2019, activities related to real estate and public administration and defense had the most significant positive contribution, while professional, scientific and technical activities, as well as financial activities and insurance activities had a lower positive contribution. On the other hand, activities in the field of arts, entertainment and recreation and other services, as well as information and communications registered an annual decline and a minor negative contribution (versus the growth and positive contribution in 2018).

<sup>11</sup> Throughout the year, the largest part of the growth in public consumption is explained by higher transfers to the health fund, higher expenditures for goods and services and wages, as well as growth of transfers to local governments.

to 0% in the last quarter of the year. In 2019, the output gap was slightly positive, indicating the absence of price pressures from the growth of domestic demand.

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

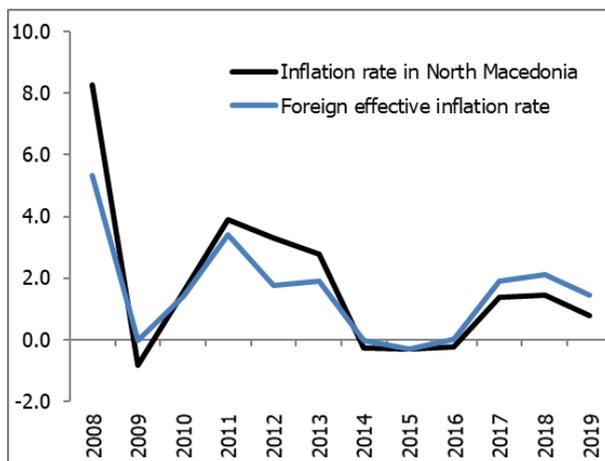
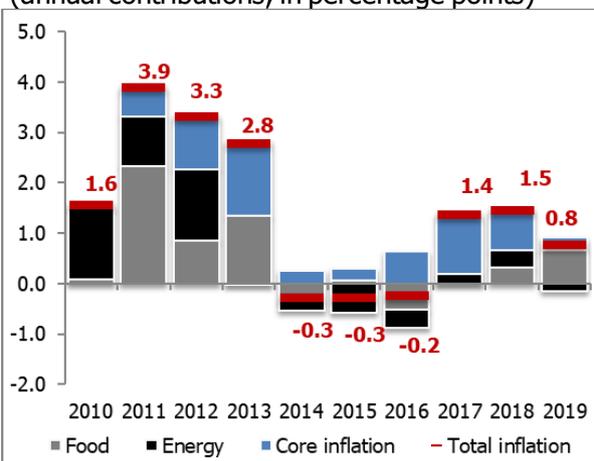


Chart 21  
Volatile (food and energy) and long-term component of inflation (annual contributions, in percentage points)



Source: State Statistical Office, Eurostat and NBRNM calculations.

Regarding the main components of the consumer price index, the food component made the highest positive contribution to the annual growth (growth of 1.9% and contribution of 0.7 percentage points in the headline inflation), reflecting mainly the higher prices of vegetables, such as and rising prices of bread and cereals. An additional positive contribution to the growth of consumer prices has the basic component (growth of 0.5% and contribution of 0.3 percentage points to headline inflation), which is due in large part to the increase in tobacco prices<sup>12</sup>, given simultaneous more pronounced downward pressures on the prices of clothing, footwear and air transport services. On the other hand, the energy component has a small negative contribution to the annual growth of domestic prices (decline of 1.1% and a contribution of -0.2 percentage points to headline inflation), mainly due to the reduction of domestic prices of oil derivatives, in accordance with the movement of the oil price on the world markets, and to a lesser extent, the reduction of the price of thermal energy<sup>13</sup>.

### 3.2. Labor market

In line with the positive economic shifts, in 2019, most labor market indicators pointed to continuation of favorable trends<sup>14</sup>. In addition, active employment measures remained effective in 2019<sup>15</sup>, as additional support for the employment growth. The number of employees increased by 5.1% in 2019, which is an acceleration compared to 2018. Moreover, the employment rate increased by 2.2 percentage points, to 47.3%. Analyzed by sectors, in 2019, the employment growth is mostly related to the *services sector*, largely reflecting the positive developments in the "administrative and auxiliary service activities", "arts, entertainment and recreation" activities, as well as in the transport and storage". *Industry*

<sup>12</sup> The annual growth of tobacco price also reflects the increase in the prices of cigarettes in March and May 2019, in consistency with the annual planned increase in excise duties on cigarettes by Denar 0.20 per piece as of 1 July 2023.

<sup>13</sup> According to the decision of the Energy Regulatory Commission, the price of heating in the BEG system as the largest supplier of heat in Skopje is reduced by 6% from August 2019, as a result of the previous decision to reduce VAT on heat from 18% on 5%.

<sup>14</sup> Labor market analysis was made using quarterly labor force surveys, that is, the annual indicators for 2019 were derived as an average of the published quarterly data.

<sup>15</sup> In 2019, the Ministry of Labor and Social Policy and the Employment Agency continued to implement active measures and programs aimed to increase employment.

also makes a significant contribution, largely reflecting the positive developments in the manufacturing industry. On the other hand, the number of people employed in agriculture in 2019 continues to decline.

Chart 22  
Selected labor market indicators (in %)

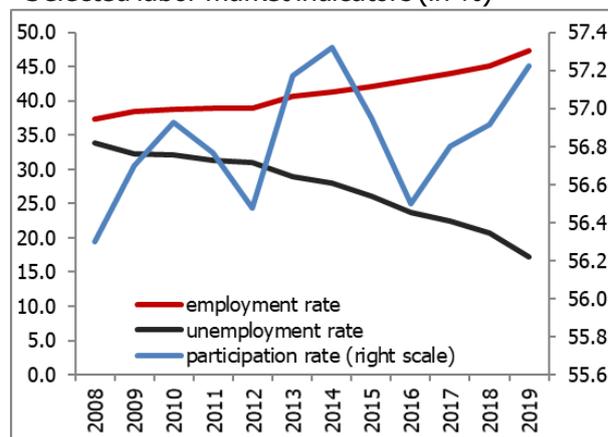
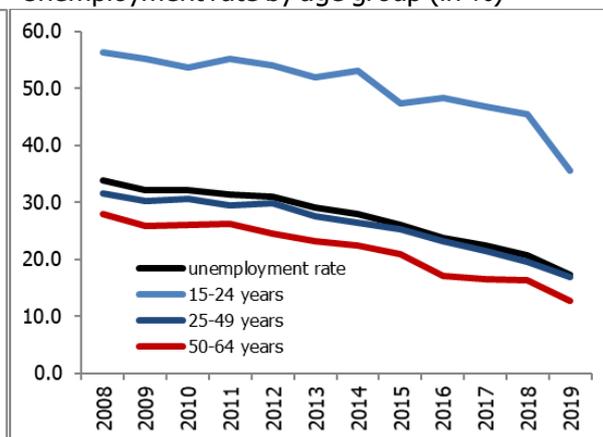


Chart 23  
Unemployment rate by age group (in %)



Source: State Statistical Office and National Bank calculations

Favorable shifts during the year have also been registered in the work force supply. The total active population increased by 0.7%, which amid a decrease in the inactive population of 0.6%, resulted in a small upward adjustment of the activity rate (of 0.3 percentage points) to 57.2%. The positive developments both on the demand and on the supply side of the labor market contributed towards reducing the unemployment to 17.3% in 2019 hitting a record low (annual decrease of 3.5 percentage points). The decrease in the overall unemployment rate is explained by the lower unemployment among all age groups, with a significant decrease observed among young people aged 15 to 24.

The growth of average paid wage continued in 2019, which is partly due to the increase in the level of the minimum net wage (in July 2018<sup>16</sup> and twice during 2019<sup>17</sup>), the increase in public sector wages<sup>18</sup>, as well as the effect of the contribution subsidy measure due to the

<sup>16</sup> The amount of minimum wage according to the Law on Minimum Wage (Official Gazette of the Republic of Macedonia No. 126/18) paid for the period from July 2018 to March 2019 is Denar 17,370 in gross amount, i.e. Denar 12,165 net in line with the 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).

<sup>17</sup> During 2019, the minimum wage was increased twice, in April and December. In April, the minimum wage was increased from Denar 12,165 to Denar 12,507 net wage (gross from Denar 17,370 to Denar 17,943) in accordance with the adjustment with the increase for the previous year of the average wage paid in the RNM, the consumer price index and the real GDP growth (with one third of the growth of each indicator, respectively, Law on Minimum Wage, Official Gazette of the Republic of North Macedonia No. 59/19). With the additional increase in December (of around Denar 2000 net), the minimum wage which is paid for the period from December 2019 to March 2020 is Denar 14,500 net (Law on Minimum Wage, Official Gazette of the Republic of North Macedonia No. 239/19).

<sup>18</sup> There was an increase in the wages of 5% for the employees in health, education and in kindergartens starting with the September wage in 2018. The RNM Budget for 2019 increased the wages of specialists by 10% from January and increased the wages by 5% of other medical personnel in the public health institutions with the payment of the January wage in 2019, and additionally increased the wages of health workers by 5%, starting with the payment of the September wage in 2019. Also, the Decision of the Government of the Republic of North Macedonia adopted in May 2019, leveled the wages of around 2,900 employees in the field of culture, from both the national and the local institutions, starting from the April wage for 2019. In addition, the amendments to the Law on Protection of Children, starting with the June wage, increase the wages of educators, carers/nurses, professional workers and associates by 16%, and the Labor Agreement increases the wages of ancillary-technical staff. The wages of social workers were also increased by 22% with the payment of the June wage, and with the payment of the September wage they also received an additional increase of 5%. In addition, there was 5% salary increase for employees in education, police, defense and the entire public sector, starting with the September wage.

wage growth<sup>19</sup>. Thus, nominal net and gross wages<sup>20</sup> registered an annual growth of 3.9% and 5.1%<sup>21</sup>, respectively (2018: 5.9% and 5.7%, respectively). An upward correction of the net wages was registered in almost all sectors of activities<sup>22</sup>, and especially high growth was registered in the "health and social care activities" (9.4%), "transport and storage" (8.6%), "construction" (6.2%), "administrative and auxiliary service activities" (5.9%), "agriculture" (5.6%) and "manufacturing industry" (5.4%). Amid moderate growth in general consumer prices, net and gross wages registered a real growth of 3.1% and 4.3%, respectively.

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

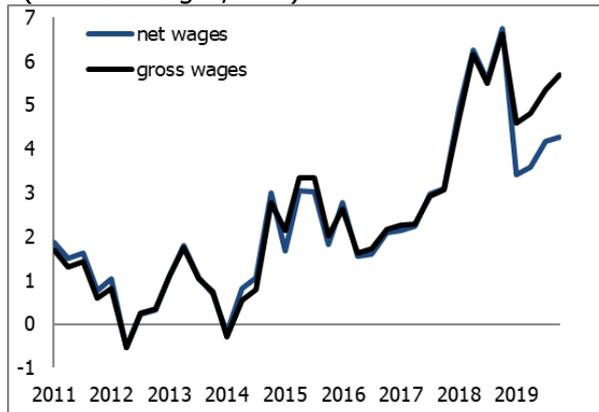
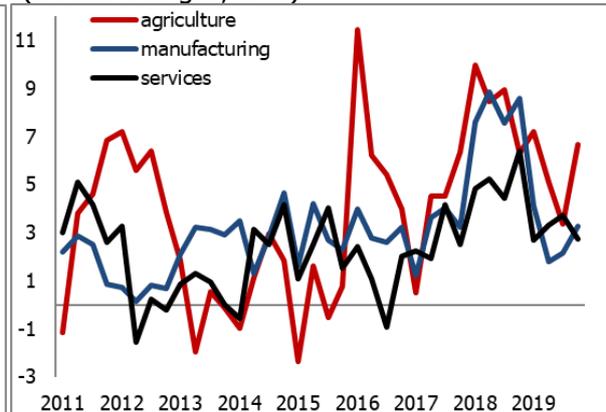


Chart 25  
Average net wages, by sector  
(annual changes, in %)



Source: State Statistical Office and National Bank calculations

Analyzing competitiveness ratios<sup>23</sup>, they somewhat deteriorated in 2019. Namely, during the year, labor productivity decreased by 1.9% (decrease of 0.9% in 2018), amid higher employment growth compared to value added growth. By sectors, negative contribution was made by all sectors, with the largest negative contribution coming from the services sector, followed by slightly lower negative contribution of industry and agriculture. In line with the wage growth and decrease in productivity, unit labor costs in 2019 are higher by 8%, amid greater increase in unit labor costs in the services sector, and to a lesser extent in industry, amid declining labor costs in agriculture.

<sup>19</sup> According to the Law on subsidizing contributions from compulsory social insurance due to wage increase, which started to be enforced with the payment of the November wage (Official Gazette of the Republic of North Macedonia No. 239/19), whereby the subsidizing of contributions is approved if the increase in the net wage is in the amount of at least Denar 600 up to Denar 6000 per month by insuree (Official Gazette of the Republic of North Macedonia No. 239/19, Articles 2 and 3).

<sup>20</sup> Total gross wages paid include: net wages paid for the reporting month, paid income tax and paid contributions (pension and disability insurance, health insurance, employment, occupational disease and water supply). The data concern wages paid.

<sup>21</sup> The faster increase in gross wages compared to net wages is a result of the increase in the rates at which contributions for compulsory pension and disability insurance and compulsory health insurance are paid, and due to the introduction of progressive personal income tax rates from early 2019. The rates at which contributions are paid in 2019 are 18.4% for compulsory pension and disability insurance and 7.4% for compulsory health insurance (previously these rates were 18% and 7.3%, respectively). The income tax, for the income acquired by labor, the income from self-employment, the income from copyrights and related rights and the income from the sale of own agricultural products, is paid at progressive rates, as follows: personal income tax rate of 10% for income up to Denar 90,000 (monthly tax base) and 18% of part of the income over Denar 90,000 (previously applied proportional tax rate so-called "flat tax", which was 10%).

<sup>22</sup> Lower wages were paid only in the sectors "arts, entertainment and recreation" and "real estate activities" .

<sup>23</sup> 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.

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

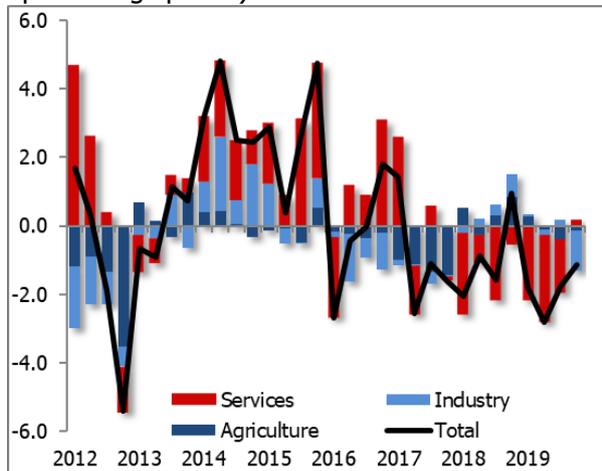
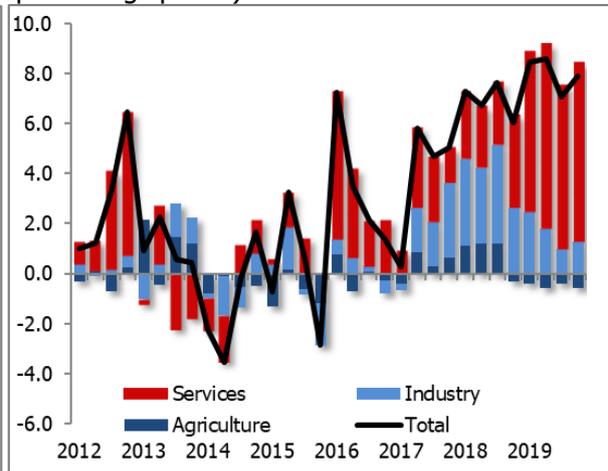


Chart 27  
Unit labor costs  
(contributions to the annual growth, in percentage points)

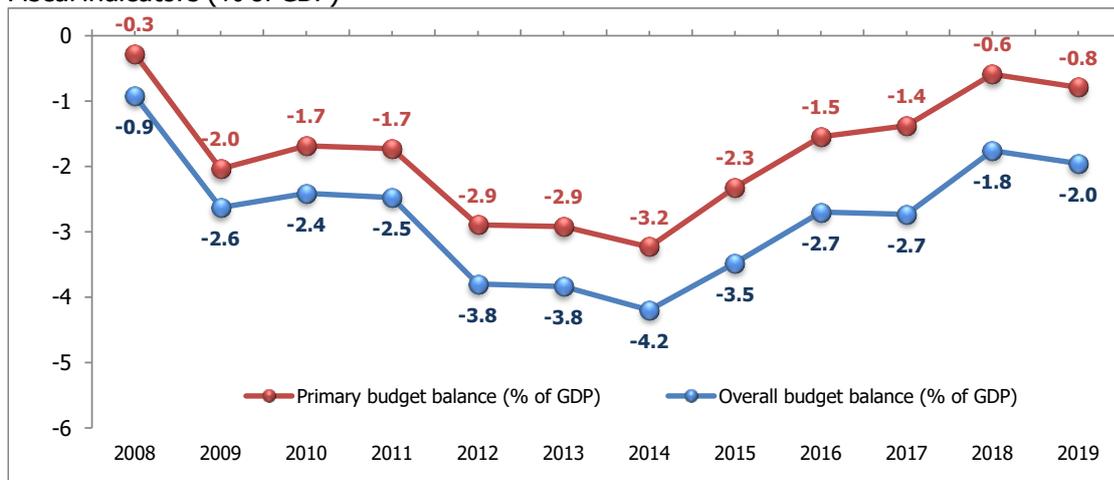


Source: State Statistical Office and National Bank calculations

### 3.3. Public finances

In 2019, the budget deficit was 2.0% of GDP<sup>24</sup>, which is a slightly higher level compared to last year's deficit of 1.8% of GDP. Similar shifts were recorded in the primary budget balance<sup>25</sup>, which amounted to 0.8% of GDP, compared to 0.6% of GDP in 2018. The realized budget deficit in 2019 is lower in relation to the initial Budget plan, as well as the Budget Revision<sup>26</sup> made at the end of the year.

Chart 28  
Fiscal indicators (% of GDP)



Source: Ministry of Finance and NBRNM calculations.

<sup>24</sup> The budget deficit for 2019 was forecasted at 2.5% of GDP, i.e. Denar 17,700 million.

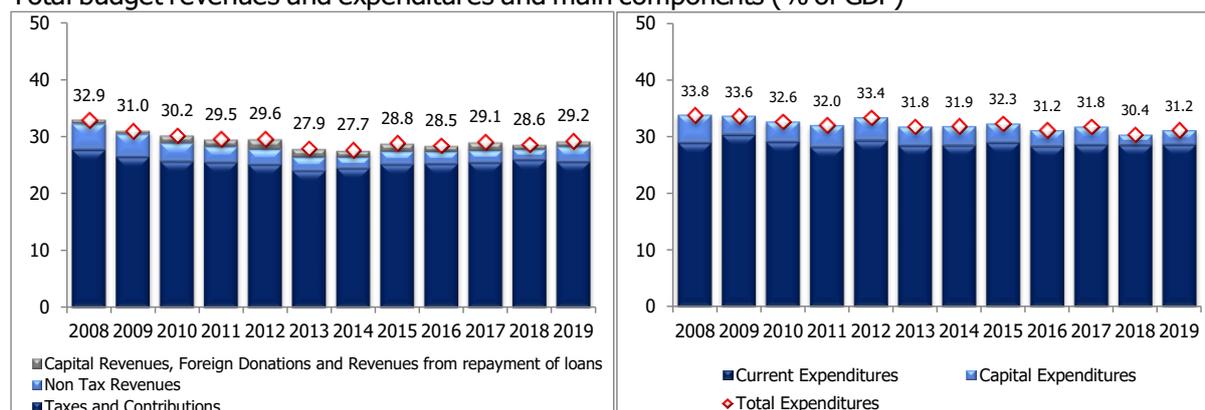
<sup>25</sup> Primary budget balance is the difference between total budget revenues and total budget expenses, less the repayment of current loan (interest) liabilities. This fiscal indicator is considered more appropriate for the analysis of the current policy course, due to the fact that it does not include fiscal costs related to past conduct of fiscal policy relative to the public debt.

<sup>26</sup> With the budget revision from October 2019, the total budget revenues and expenditures were reduced almost equally by Denar 297 million, and the budget deficit (Denar 17,700 million) remained as initially planned.

Total budget revenues in 2019 were higher by 8.2% on annual basis, with higher non-tax revenues<sup>27</sup>, contributions, taxes and other revenues<sup>28</sup> being registered. While registering increase in current and capital expenditures, the budget expenditures increased by 8.7% on annual basis. In line with the accelerated growth, the share of budget revenues and expenditures in GDP in 2019 slightly increased and amounted to 29.2% and 31.2%, respectively (28.6% and 30.4% in 2018, respectively).

Chart 29

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

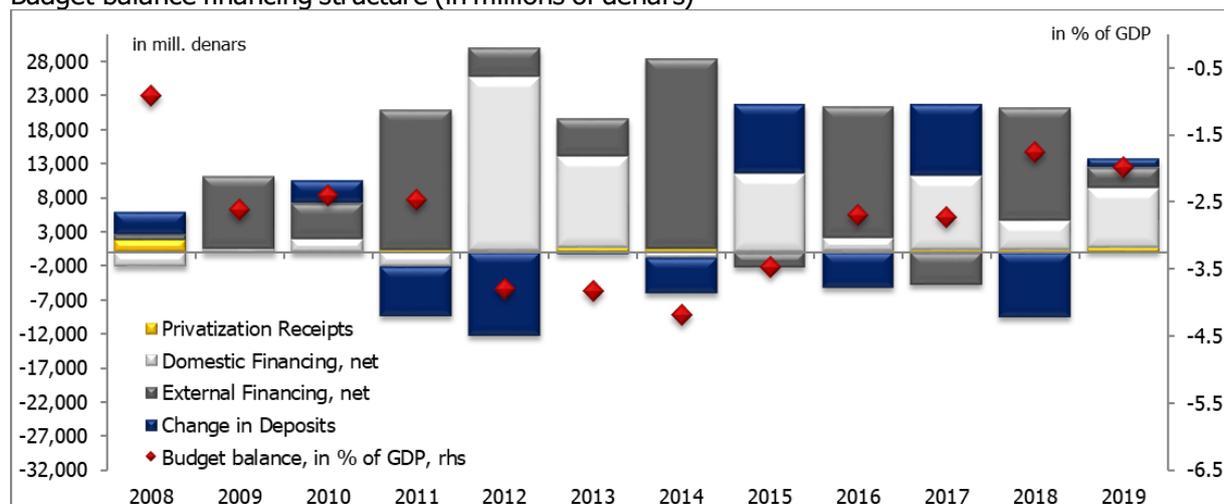


Source: Ministry of Finance and NBRNM calculations.

The budget deficit in 2019 (Denar 13,631 million) was mostly financed by domestic government borrowing by issuing government securities, and to a lesser extent, by foreign borrowing<sup>29</sup> and by using government deposits with the National Bank.

Chart 30

Budget balance financing structure (in millions of denars)



Source: Ministry of Finance and NBRNM calculations.

In the primary government securities market in 2019, the stock of issued securities increased by Denar 9,145 million, reaching Denar 106,354 million at the end of the year. Most

<sup>27</sup> Higher non-tax revenues in 2019 were mostly due to inflows to the Pension and Disability Insurance Fund's account in the RNM Budget. These inflows are a result of the transfer of funds of the private pension funds in accordance with the Law Amending the Law on Mandatory Fully Funded Pension Insurance and the Law Amending the Law on Pension and Disability Insurance (Official Gazette of RM No. 245 of 28 December 2018). With these amendments, the membership of some insuree categories in the second pillar of the pension system ceased on 1 January 2019.

<sup>28</sup> Other revenues include capital revenues, donations from abroad and revenues from recovered loans.

<sup>29</sup> Taking out a loan from the World Bank in the amount of Euro 125 million, in October 2019, intended for development policies for public finances and competitiveness.

of the new issues of government securities were with a longer maturity than the one of the securities that were falling due, which contributed towards increasing the average maturity of the issued government securities, and thus to deepening this segment of the financial markets, as well as for increasing the share of government bonds in the debt structure. Favorable movements were also registered in the debt currency structure seen through the growth of the government securities portfolio in domestic currency. In 2019, the new domestic government debt was at lower interest rates.

Chart 31  
Currency structure of government securities (in millions of denars)

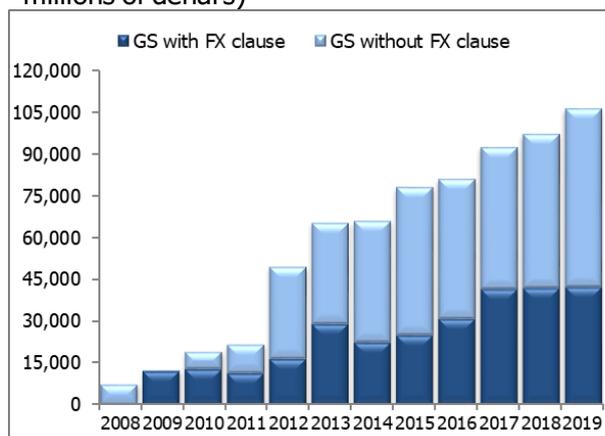
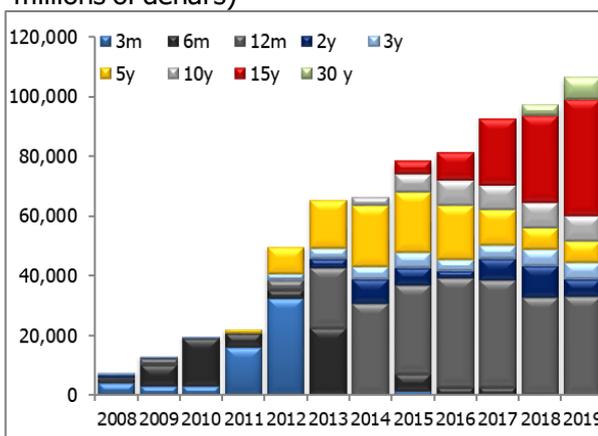


Chart 32  
Maturity structure of government securities (in millions of denars)



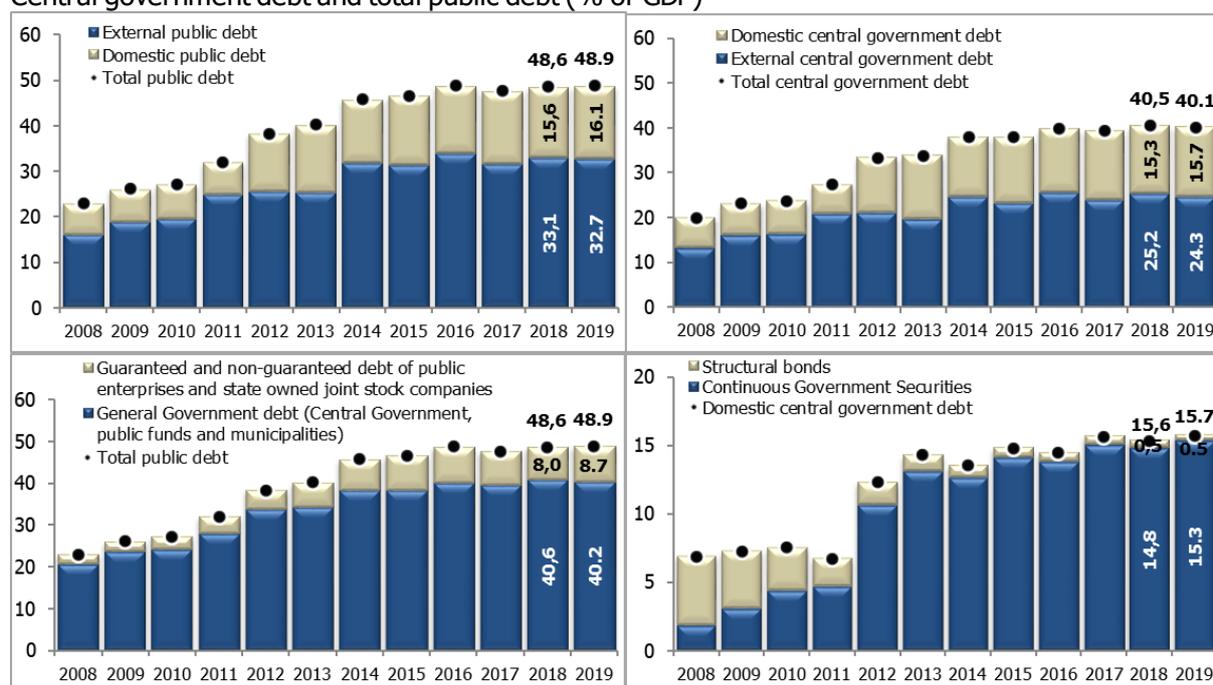
Source: Ministry of finance and NBRNM.

In 2019, the central government debt slightly decreased from 40.5% to 40.1% of GDP. The annual decrease in central government debt is due to the lower external debt (from 25.2% to 24.3% of GDP), amid small increase in the domestic debt (from 15.3% to 15.7% of GDP). At the end of 2019, total public debt<sup>30</sup> was 48.9% of GDP, which is a slight annual increase (48.6% of GDP). The annual increase in public debt is due to the increase in the domestic public debt (from 15.6% to 16.1% of GDP), amid decrease in the external public debt (from 33.1% to 32.7% of GDP). Within the public debt, the total government debt (debt of the central government, public funds and municipalities) in 2019 registered a minimal decline from 40.6% to 40.2% of GDP, while the debt of public enterprises (guaranteed and non-guaranteed) increased by 0.7 percentage points and at the end of the year it equaled 8.7% of GDP<sup>31</sup>. At the end of 2019, the share of government debt in total public debt was 82.2% (83.5% in 2018), while the share of public enterprise debt (guaranteed and non-guaranteed) in the total public debt was 17.8% (16.5% in 2018).

<sup>30</sup> The public debt is defined under the Law on Public Debt (Official Gazette of the Republic of Macedonia No. 62/2005, 88/2008, 35/2011, 139/2014 and 98/2019) as the sum of the government debt and the debt of public companies 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.

<sup>31</sup> According to the amendments to the Law on Public Debt from May 2019, the non-guaranteed debt of public companies and joint stock companies established by the state or municipalities, municipalities within the City of Skopje and the City of Skopje is calculated in public debt (Official Gazette No. 62/2005, 88/2008, 35/2011, 139/2014 and 98/2019)

Chart 33  
Central government debt and total public debt (% of GDP)

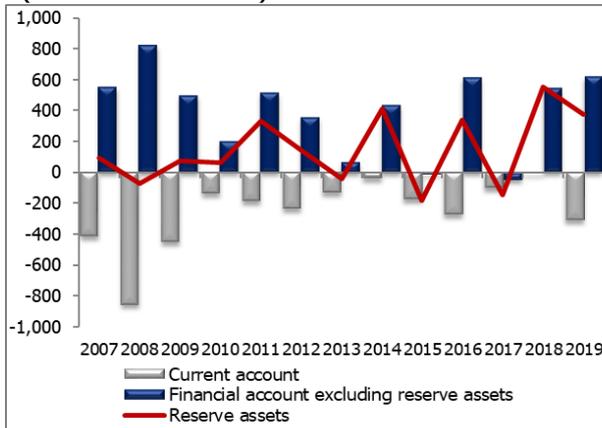


Source: Ministry of Finance and NBRNM calculations.

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

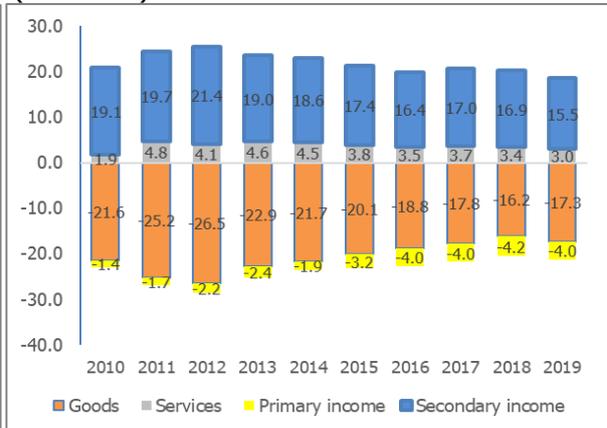
In 2019, the current account deficit remained moderate, without any indication of larger imbalance in the external sector. On annual basis, the negative balance in current transactions widened by 2.6 percentage points and reached 2.8% of GDP. The deepening of the current account balance is mostly due to the increased deficit in foreign trade of goods and services, i.e. the higher trade deficit, registered in conditions of faster growth of import compared to the growth of export of goods and the reduced surplus of services balance. In the category "services", the lower positive balance is due to the realized net outflows based on construction services (in 2018, low net inflows were realized), as well as the lower net inflows in other business services and transport. Such performance was partially neutralized by the higher surplus in telecommunications, computer and information services, which is actually a trend in the past few years, as well as the smaller deficit in services for the use of intellectual property. Secondary income deteriorated mainly due to lower net inflows in the country, in conditions of growth of net inflows from private transfers, i.e. higher net purchase on the foreign exchange market, while the deficit in primary income is almost unchanged compared to 2018.

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



Source: NBRNM

Chart 35  
Main current account components  
(% of GDP)



The deficit in foreign trade widened on an annual basis by 13.1% (or 1.1 percentage points of GDP), compared to the small narrowing in the previous year. Thereby, the export of goods continues to show positive rates of change, but smaller compared to previous years. Compared to the previous year, exports increased by 9.4%, mainly due to the export of machinery and transport equipment and the export of chemical products, as a result of the higher export activity of the new facilities in the economy, while from the traditional export sectors only the export of food, beverages and tobacco recorded a slightly higher positive contribution. However, due to the deteriorating signals from the global environment, in the last quarter of 2019, weaker export performance of new foreign-owned companies and annual decline in exports to Germany, as the most important export market of these companies in the automotive industry were registered. The movements of the import component of the foreign trade largely reflected the export performance. The annual growth of 10.3% mostly stems from the raw material imports by the new foreign export capacities, which is reflected through higher import of non-ferrous metals, machines and transport devices, as well as chemical products. Also, the energy component contributed to the growth of imports, mainly due to the higher quantity import of oil derivatives, at lower realized import prices, adequate to the the lower stock exchange prices of crude oil.

Chart 36  
Contributions to the annual export growth (in percentage points)

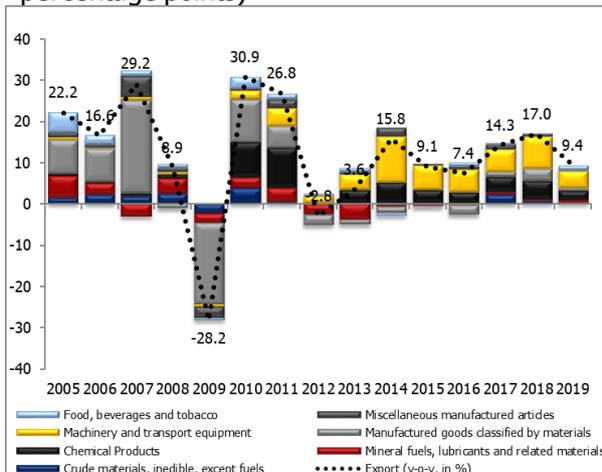
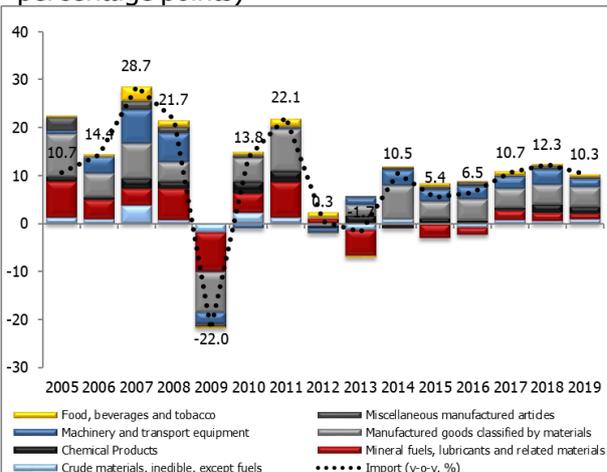


Chart 37  
Contributions to the annual import growth (in percentage points)



Source: State Statistical Office

The indicators of the price competitiveness of the domestic economy<sup>32</sup> in 2019 registered favorable movements compared to the previous year. Namely, the real effective exchange rate deflated by the consumer prices depreciated by 0.9% on annual basis, while the index calculated with producer prices of industrial products decreased by 0.4% over the same period. Changes annually in both indices are the result of favorable changes in relative prices, a mild appreciation of the nominal effective exchange rate.

Chart 38  
NEER and REER, without primary commodities  
calculated according to the consumer price  
and producer price index (2015=100)

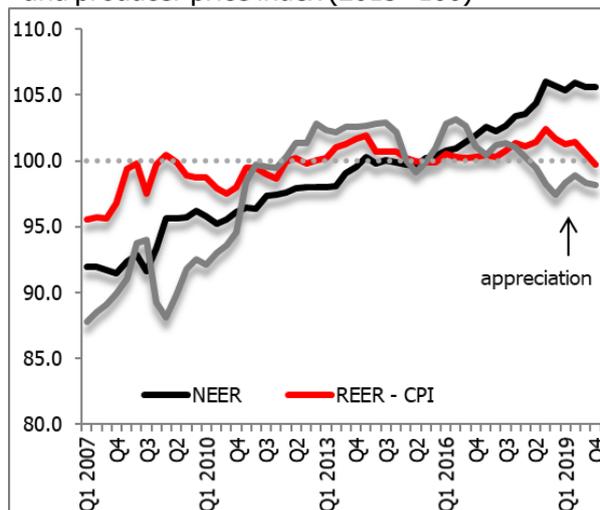
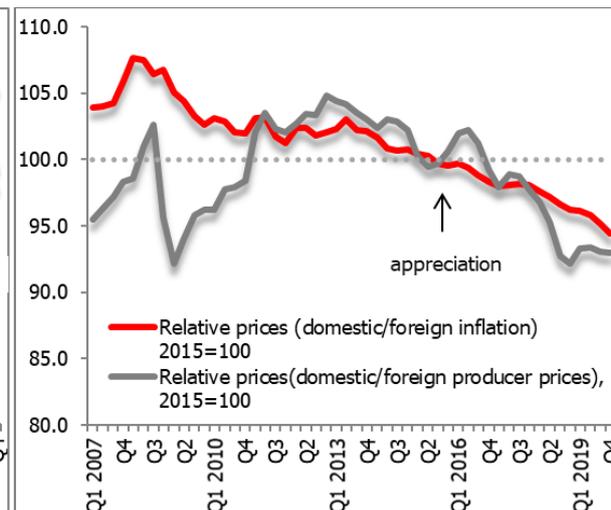


Chart 39  
Relative prices  
(2015=100)



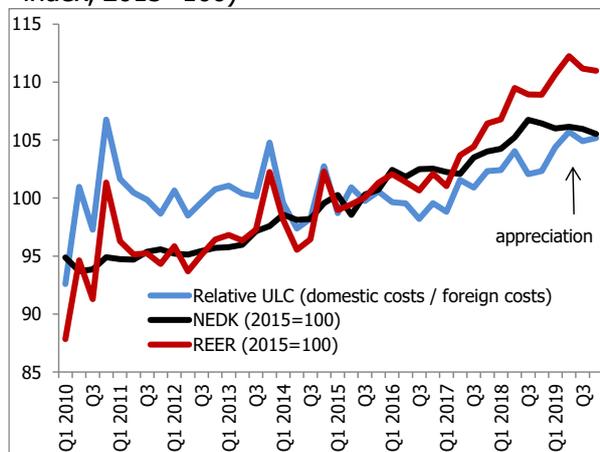
Source: NBRNM

The REER indices calculated according to the unit labor costs<sup>33</sup> indicate deterioration in the price competitiveness of the domestic economy in 2019. The REER index calculated with weights based on the total foreign trade appreciated by 2.5%, amid small appreciation of the NEER of 0.2% and an annual growth in relative labor costs of 2.3%. Annual appreciation of 2.5% was registered in the REER index calculated by using weights based on the foreign trade without primary commodities determined by the growth of the relative labor costs (of 1.8%) as well as the annual appreciation of the NEER (of 0.7%).

<sup>32</sup> The analysis of indicators of price competitiveness is based on REER indices, calculated using weights based on the foreign trade without primary commodities. Primary products 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.

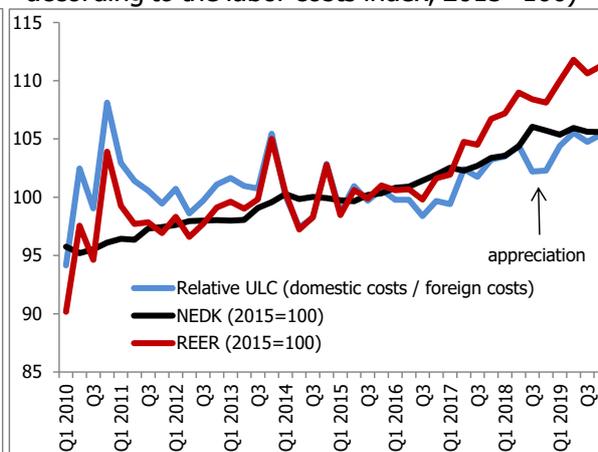
<sup>33</sup> The REER indices based on the unit labor costs are NBRNM internal calculations and do not represent a formal statistical survey. The calculation uses the data on the unit labor costs indices at a level of the entire economy, published by the ECB and the Bureau of Labor Statistics of the United States and the OECD. Data based on internal calculations are exceptions, such as the data pertaining to Russia and Serbia, where the calculated indices for Serbia refer only to the industrial sector.

Chart 40  
REER (calculated according to the labor costs index, 2015=100)



Source: NBRNM

Chart 41  
REER, without primary commodities (calculated according to the labor costs index, 2015=100)

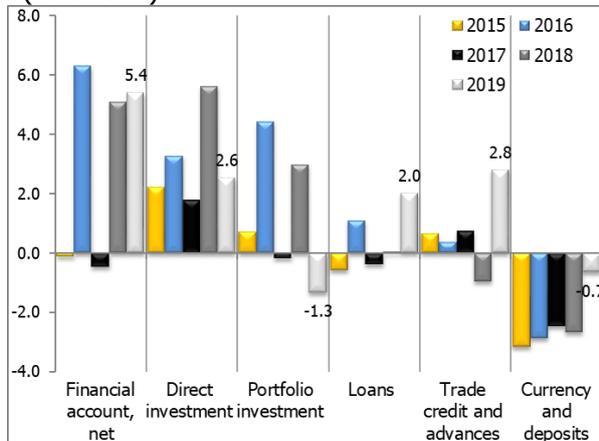


Source: NBRNM

The financial flows in the balance of payments registered net inflows, thus ensuring full financing of the current account deficit, as well as significant increase in foreign reserves during the year. Thus, the financial account recorded net inflows in the amount of Euro 615.8 million or 5.4% of GDP, which is a continuation of the positive trend from last year. Thereby, net inflows were recorded in trade credits, direct investments and loans, which were only partially offset by net outflows based on portfolio investments and currencies and deposits. Foreign direct investment equaled Euro 290.6 million, or 2.6% of GDP, which is an annual fall of 3 percentage points of GDP. Although FDI is declining on an annual basis, the amount registered in 2019 is at the level of the historical average from 2010 onwards, with the exception of 2018 when the above-average 5.6% of GDP was achieved. Structurally, almost two thirds of the decrease in direct investment is explained by the assets growth, mainly due to increased claims on the basis of debt instruments. In addition, there was a fall in liabilities based on direct investments, which mainly results from the reduced reinvested earnings, which in turn is a result of higher dividends paid in 2019. However, it is important to emphasize the favorable structure of liabilities based on direct investments, where 68% of total liabilities relate to equity, which is growing on an annual basis by about 0.3 percentage points of GDP. A significant source of inflows in the financial account in 2019 were the net inflows based on borrowing, primarily of other sectors<sup>34</sup> (part of which refers to the borrowing of public enterprises for the construction of road infrastructure), supplemented by government borrowing and depository corporations. Such performances were partially neutralized by net outflows based on portfolio investments, mainly due to the reduction of the country's net foreign liabilities based on issued debt securities when the banking sector invests in domestic Eurobonds, as well as the reduction of net assets in the category "currencies and deposits", mostly due to the reduced assets of depository corporations.

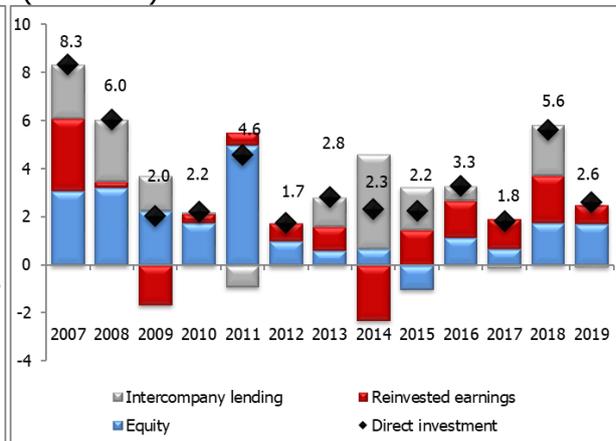
<sup>34</sup> Other sectors category includes banks and non-banking corporate sector.

Chart 42  
Financial account  
(% of GDP)



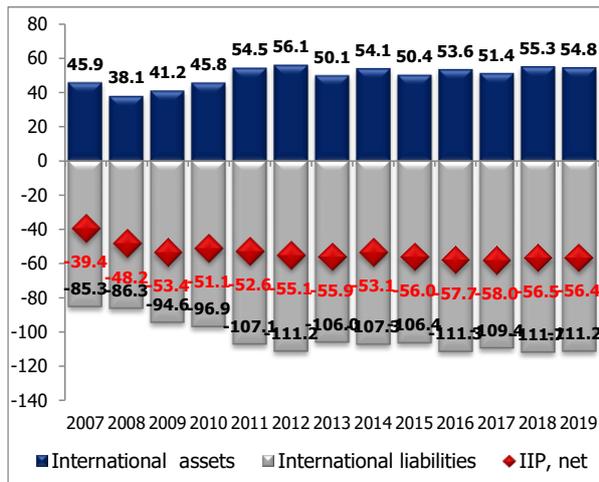
Source: NBRNM

Chart 43  
Direct investment  
(% of GDP)



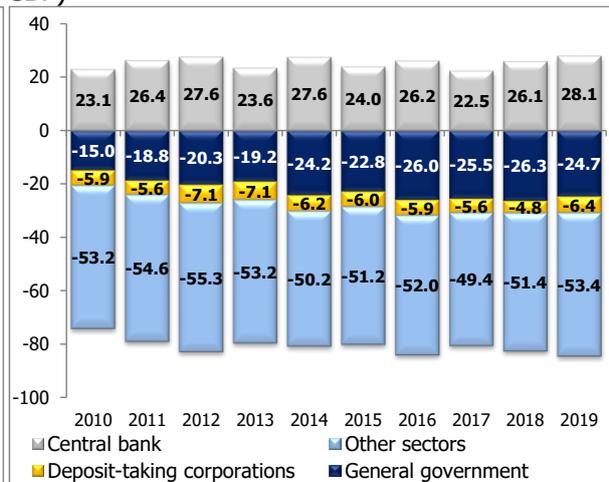
The net international investment position (IIP) of the Macedonian economy is negative and at the end of the last quarter of 2019 amounted to Euro 6,393.1 million, or 56.4% of GDP. On an annual basis, the share of IIP in GDP is almost unchanged, and in conditions of decrease in international liabilities and international assets (by 0.6 percentage points and 0.5 percentage points of GDP, respectively). In absolute terms, the negative international investment position is higher by 5.9% on annual basis, as a result of higher growth in the amount of international liabilities compared to the growth of international assets.

Chart 44  
International Investment Position (% of GDP)



Source: NBRNM

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

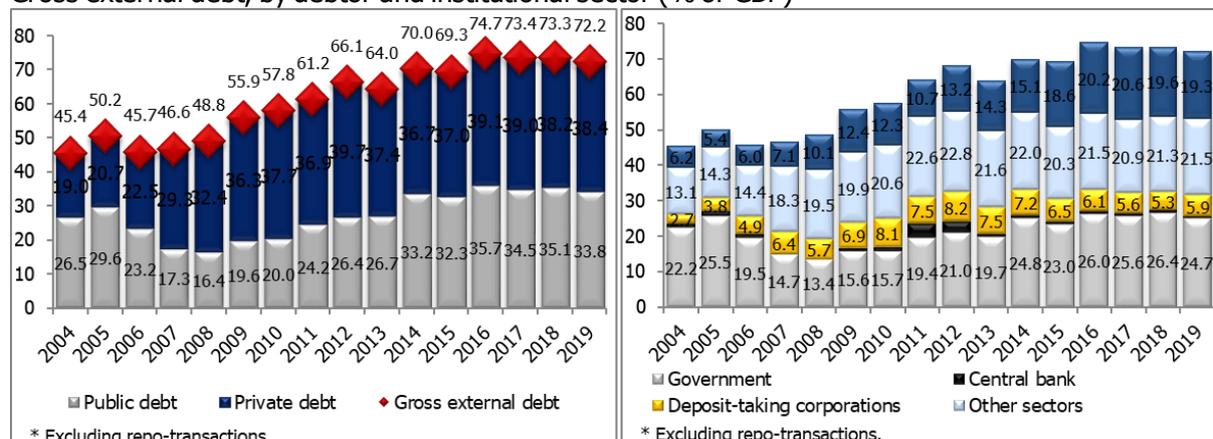


The analysis of the international investment position by individual sectors indicates favorable shifts in the net position with the central bank (as a result of the increase in foreign reserves) and the net position of the country (mainly as a reflection of lower foreign liabilities based on debt securities, in terms of investment of domestic banks in Eurobonds issued by the Government). At the same time, these movements were neutralized by increased net liabilities in other sectors of the economy (higher net liabilities to direct investors, reduced net trade credits and increased net long-term borrowings) and the net position of depository corporations (lower net assets in currencies and deposits).

At the end of 2019, the gross external debt totalled Euro 8,191.2 million, or 72.2% of GDP. On annual basis, gross debt decreased by 1.1 percentage points of GDP, in conditions of declining public debt (by 1.3 percentage points of GDP), amid a small increase in private sector debt (by 0.2 percentage points of GDP). The decrease in the indebtedness of the public sector is mostly due to the lower liabilities of the government based on debt securities, with the higher liabilities based on long-term loans of public banks and public enterprises acting in opposite direction. At the same time, the annual growth of private debt mainly stems from the higher debt of the banking sector, higher long-term liabilities based on loans and increased short-term liabilities based on currencies and deposits.

Chart 46

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



Source: NBRNM

External debt ratios of the national economy remain in the safe zone. Gross external debt to GDP ratio still classifies our economy in the group of highly indebted countries, while all other ratios point to low indebtedness. However, the dynamics analysis indicateds favoral annual shifts in almost all solvency and liquidity indicators.

As of 31.12.2019, net external debt stood at Euro 2,807.8 million, or 24.8% of GDP, which is a small annual increase of 0.4 percentage points of GDP. The higher net external debt is mainly due to higher net debt of the private sector (by 3.3 percentage points of GDP), given decrease in the public net debt (of 2.9 percentage points of GDP).

Table 1  
External debt indicators

	<i>Solvency</i>				<i>Liquidity</i>		
	Interest payments/ Export of goods and services and other inflows	Gross debt/ Export of goods and services and other inflows	Gross debt/ GDP	Debt servicing/ Export of goods and services and other inflows	Foreign reserves/ Short-term debt	Foreign reserves/ Short-term debt, with residual maturity*	Short-term debt/ Overall debt
	in %				ratio	ratio	in %
31.12.2004	2.41	129.3	47.3	12.4	1.14	0.89	30.27
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	2.38	149.9	79.1	14.9	1.65	1.16	21.93
31.12.2017	2.69	140.1	77.0	12.7	1.31	0.89	24.03
31.12.2018	2.22	131.4	77.4	15.8	1.42	1.04	25.75
31.12.2019	2.05	123.2	76.6	8.9	1.56	1.02	25.52
<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

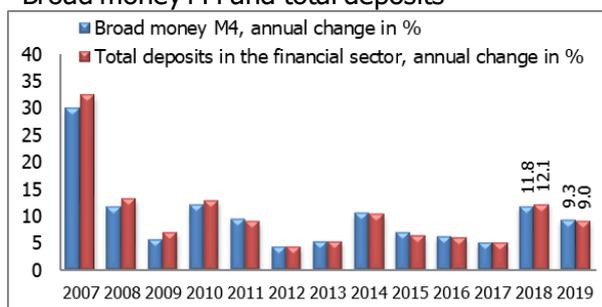
## 3.5. Monetary and credit aggregates

### 3.5.1. Monetary aggregates

In 2019, money supply and total financial sector<sup>35</sup> deposits registered a solid increase, which was moderately weaker compared to the previous year. The increase in broad money M4 and deposits corresponds with further expansion of the economic activity, favorable labor market developments and as well as the favorable external position of the economy. From sectoral and currency aspect, the growth in total financial sector deposits mostly emanates from household deposits, i.e. from deposits in domestic currency (including demand deposits).

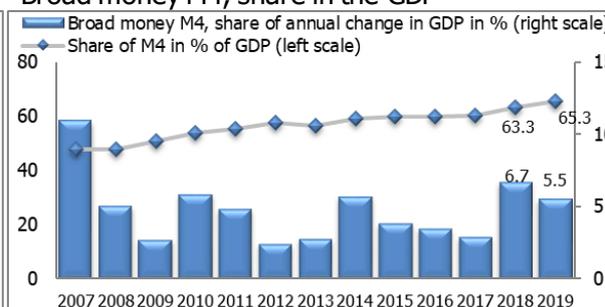
<sup>35</sup> Data refer to non-government deposits in banks and savings houses, funds of other financial institutions on the accounts with the National Bank and funds of local government authorities on the accounts with the National Bank. The data are consistent with the methodological changes of the National Bank from June 2018. For more information on the methodological changes visit: [http://www.nbrm.mk/monetarna\\_statistika\\_i\\_statistika\\_na\\_kamatni\\_stapki.nsp.x](http://www.nbrm.mk/monetarna_statistika_i_statistika_na_kamatni_stapki.nsp.x).

Chart 47  
Broad money M4 and total deposits



Source: NBRNM

Chart 48  
Broad money M4, share in the GDP



In 2019, broad money M4 grew by 9.3%, which is a mild annual deceleration (last year: 11.8%). By structure, the growth of money supply is due to the positive contribution of all three components, but this year, the largest contribution was made by demand deposits. Given the decelerated monetary growth, the annual money supply growth to GDP ratio at the end of the year equaled 5.5% and decreased compared to last year (6.7%). The share of the money supply in GDP continued to grow and amounted to 65.3% at the end of the year, compared to 63.3% in the previous year.

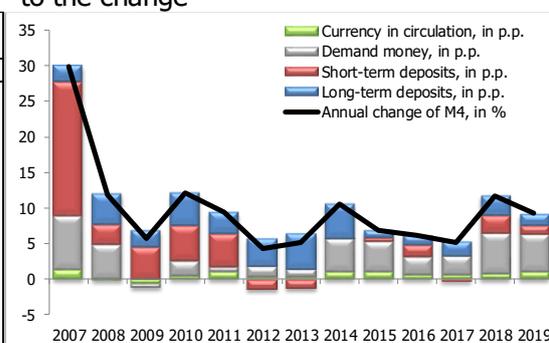
Table 2  
Money supply components - stock and flows in millions of denars and in %

	Balance as of			Annual change		
	2017	2018	2019	2017	2018	2019
	in millions of denars			in %		
Currency in circulation	29,968	32,233	36,108	6.3	7.6	12.0
Demand money	96,288	117,616	139,580	11.1	22.1	18.7
<b>M1</b>	126,256	149,849	175,688	9.9	18.7	17.2
Short term denar deposits up to 1 year	47,834	49,487	49,042	-6.4	3.5	-0.9
Short term foreign currency up to 1 year	106,566	114,501	120,160	2.1	7.4	4.9
<b>M2</b>	280,656	313,837	344,889	3.8	11.8	9.9
Long term denar deposits over 1 to 2 years	37,407	38,132	36,845	6.5	1.9	-3.4
Long term foreign currency over 1 to 2 years	18,926	21,466	22,294	12.6	13.4	3.9
<b>M3</b>	336,989	373,436	404,028	4.6	10.8	8.2
Long term denar deposits over 2 years	22,647	29,369	35,767	12.5	29.7	21.8
Long term foreign currency over 2 years	13,295	14,010	15,616	7.3	5.4	11.5
<b>Total deposits*</b>	246,675	266,965	279,723	2.8	8.2	4.8
<b>Total deposits</b>	342,963	384,581	419,303	5.0	12.1	9.0
<b>M4</b>	372,931	416,814	455,411	5.1	11.8	9.3

\*without demand deposits

Source: NBRNM

Chart 49  
Money supply, annual flow and contribution to the change



In 2019, total financial sector deposits registered a solid increase of 9.0% which was moderately weaker compared to the previous year (12.1%). Analyzed by sector, also this year the household deposits are the growth generator, supplemented by the contribution of corporate deposits. Unlike the previous year, in 2019 the contribution of other sectors deposits<sup>36</sup> is significantly lower, due to the transfer of funds from private pension funds to the account of the Pension and Disability Insurance Fund in the Budget of RNM<sup>37</sup>. Analyzed by currency, over three quarters of the total deposit growth resulted from denar deposits<sup>38</sup>, with lower contribution of foreign currency deposits. According to the maturity structure, the growth is still mostly due to the positive contribution of demand deposits, with long-term and short-term deposits having an additional positive contribution.

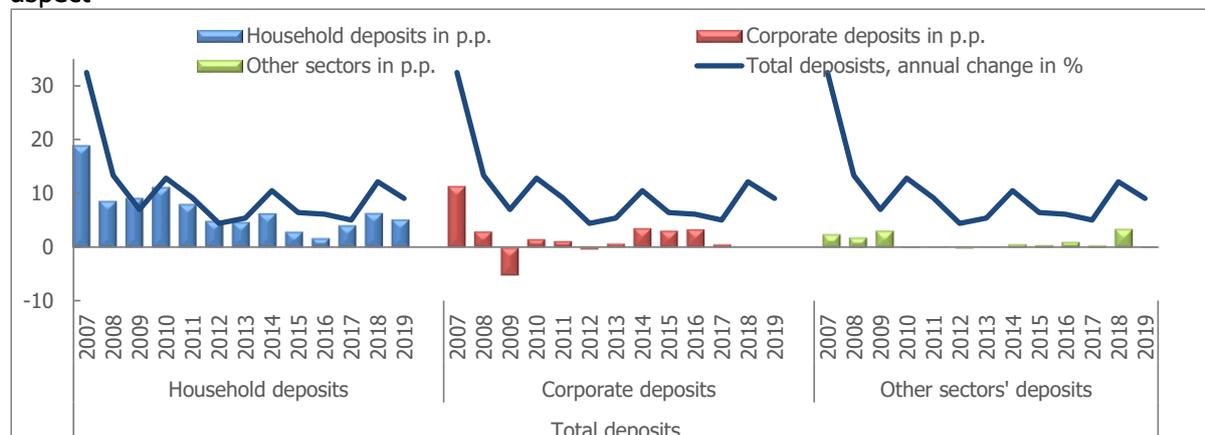
<sup>36</sup> Other sectors deposits include deposits of other financial institutions, local government deposits and deposits of non-profit institutions serving households with banks, as well as denar transferable deposits of other financial institutions and local government with the National Bank.

<sup>37</sup> In 2019, the transfer of funds of the private pension funds from the Pension and Disability Insurance Fund's account to the Budget of the RNM in accordance with the Law Amending the Law on Mandatory Fully Funded Pension Insurance and the Law Amending the Law on Pension and Disability Insurance (Official Gazette of RM No. 245 of 28.12.2018). With these amendments, the membership of some insuror categories in the second pillar of the pension system ceased on 1 January 2019.

<sup>38</sup> Including demand deposits.

Chart 50

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

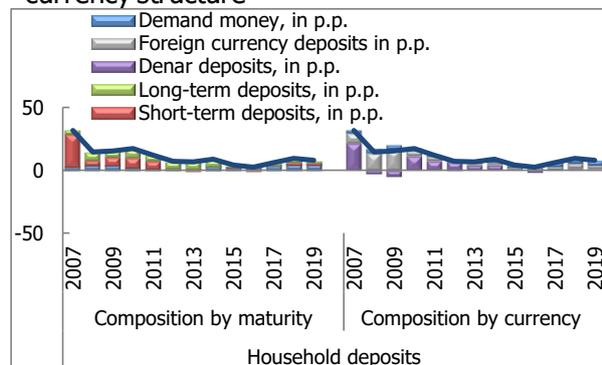


Source: NBRNM

The stable macroeconomic environment, preserved confidence and stable expectations contributed towards registering an annual increase of 7.9% of household deposits<sup>39</sup> in 2019 (9.5% in 2018). Analyzed in terms of the maturity structure, the growth this year also largely stems from the increase in demand deposits. At the same time, the growth of short-term and long-term savings continues. Positive developments are observed in the currency structure of household savings, given the larger contribution of denar deposits to the total growth of household savings.

Chart 51

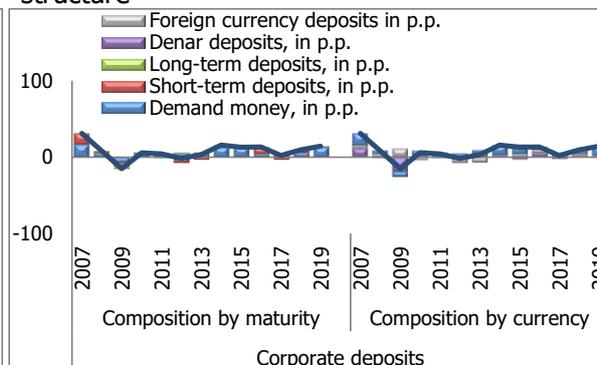
Total household deposits, annual change and contribution to the change by maturity and currency structure



Source: NBRNM

Chart 52

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



In 2019, corporate deposits growth accelerated by 14.6% (9.5% in 2018). From a maturity point of view, demand deposits made the largest contribution to the growth. Long-term deposits have a small positive contribution, while this year the contribution of short-term deposits is minimally negative. Observing by currency, denar deposits<sup>40</sup> account for most of the growth of total corporate deposits, amid a smaller positive contribution of foreign currency deposits.

<sup>39</sup> Deposit data also include demand deposits.

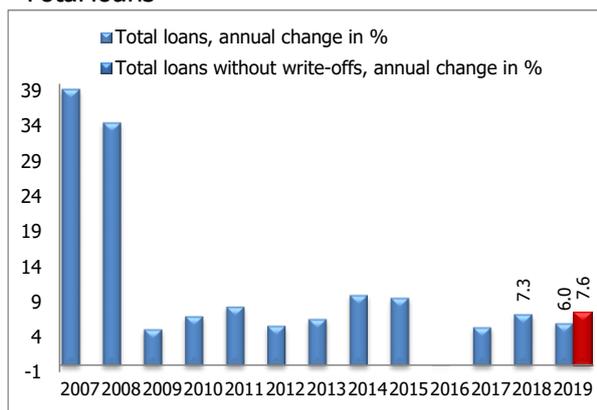
<sup>40</sup> Including demand deposits.

Taking into account such performance, the degree of euroization, measured by the share of deposits with foreign currency component in total deposits, in 2019 moderately decreased to 38.5% (40% in the previous year). In the case of household deposits, the share of deposits with foreign currency component reduced to 46.4% (from 47.6% in the previous year).

### 3.5.2. Lending

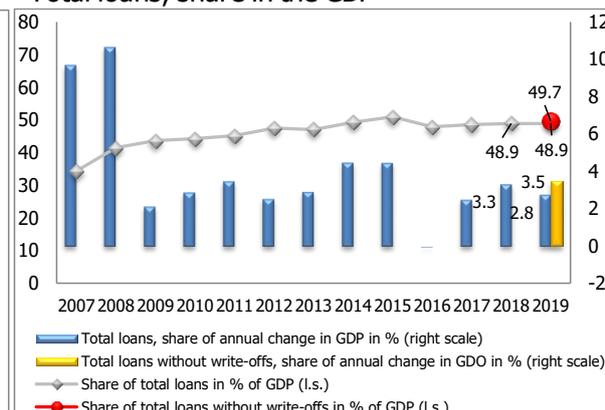
The solid credit support of the banking sector to the domestic economy continued during 2019 in conditions of favorable macroeconomic developments, favorable perceptions of banks, their solid solvent and liquidity position, as well as the present propensity to borrow. In 2019, the banks registered increased lending activity by 6.0%. Controlling the effect of the mandatory write-offs made in the second half of the year as required by the amendments to the regulation<sup>41</sup>, the annual loan growth was 7.6% which is similar to growth registered in the previous year (7.3%). Loans granted to the "household" sector remain the main growth generator, with the lending to the corporate sector having smaller positive contribution. Loans granted to household sector continue to be the main growth generator, while lending to the corporate sector has a smaller positive contribution. The National Bank reduced the key interest rate in 2019, thus providing additional support to lending<sup>42</sup>. The indicator of the share of the annual increase in the total loans in the GDP at the end of 2019 equaled 2.8 percentage points (3.5 percentage points without write-offs), as opposed to 3.3 percentage points in 2018, while the share of the credits in the GDP remained unchanged compared to the previous year (48.9% i.e. it increased to 49.7% if isolate the write-off effect).

Chart 53  
Total loans



Source: NBRNM

Chart 54  
Total loans, share in the GDP

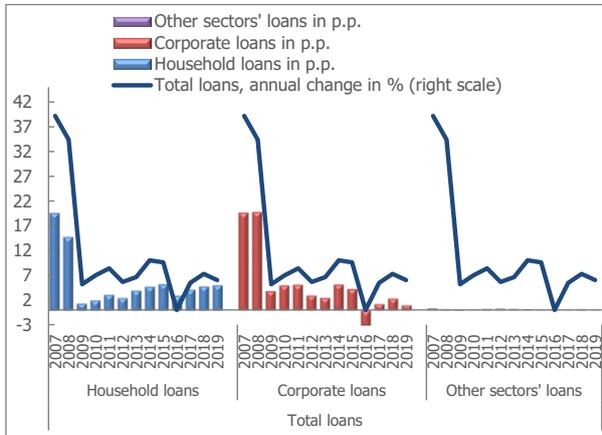


Such shifts in lending correspond to the banks' perceptions of reduced risks, in conditions of favorable macroeconomic environment. Namely, according to the Lending Activity Surveys of the National Bank in 2019, there is a further pronounced net easing of credit conditions in the households sector compared to the previous year and moderate easing in the corporate sector. In terms of lending to households, the analysis by the loan type indicates that the annual growth of loans to households also in 2019 results from the growth of consumer and housing loans, which also registered moderate acceleration.

<sup>41</sup> On 9 August 2018, the National Bank Council adopted the Decision on the methodology for credit risk management that requires from banks to transfer, from the on-balance sheet to the off-balance sheet records (and to continue to transfer), all claims that have been fully booked for more than one year. The implementation of the Decision started from July 2019. Notwithstanding the transfer of these claims to the off-balance sheet record, the banks reserve the right for collection.

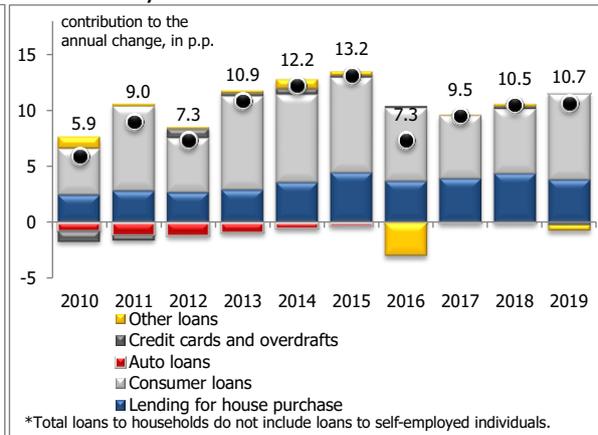
<sup>42</sup> In March 2019, the National Bank cut the interest rate on CB bills by 0.25 percentage points, from 2.50% to 2.25%.

**Chart 55**  
Total loans, annual change and sectoral structure

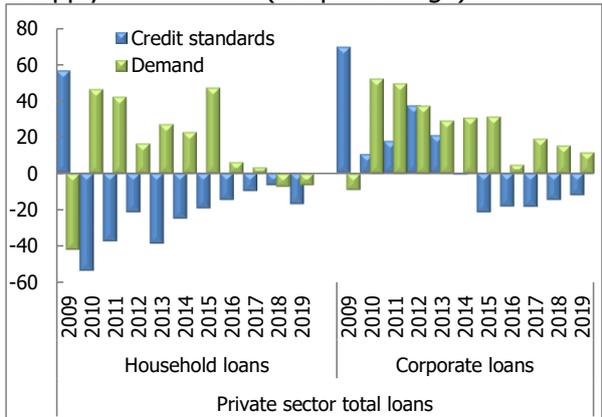


Source: NBRNM

**Chart 56**  
Total household loans, annual change and structure by use



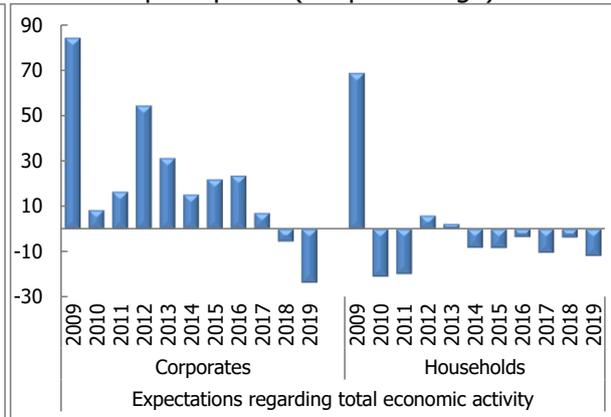
**Chart 57**  
Supply and demand (net percentage)\*



\*\*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, please visit the NBRNM website.  
 Source: Lending Survey, NBRNM.

**Chart 58**  
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.

## **IV. Macroeconomic environment and monetary policy in 2020 - 2022**

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. For the purposes of achieving the legally determined goal, the National Bank is committed to applying strategy of maintaining stable nominal exchange rate against the euro. The importance of the exchange rate for maintaining price stability and stable inflation expectations of economic agents arises from the characteristics of the domestic economy, as a small and open economy with high import dependence. The operational monetary policy framework will remain flexible thus ensuring stable liquidity and equilibrium on the foreign exchange market. Thus, the monetary policy will contribute to preserving the overall macroeconomic stability, as a key factor in creating favorable environment for sustainable economic growth.

The latest official macroeconomic forecasts of the National Bank from October 2019 pointed to a stable and relatively favorable environment for the implementation of monetary policy in the period 2020-2022. The estimates showed further GDP growth, averaging around 4%, supported by both domestic and export demand. Inflation expectations were aimed at maintaining low and stable inflation that would gravitate around 2%. Regarding the external sector, the current account deficit was assessed as moderate, averaging around 1.5% of GDP, financed through foreign direct investment and public sector borrowing, which will enable additional growth of foreign reserves and their maintenance in the safe zone. With favorable expectations and growth of funding sources, the October scenario indicated solid growth of total loans, in 2020-2022 by an average of 8.0%.

However, since the beginning of 2020, dramatic changes have taken place in the global and domestic economic environment. The outbreak of the COVID-19 virus pandemic, as an unexpected external shock, is already certain to affect both the global and domestic economies. The effects will be felt in several segments, which will mean greater deviation from the October forecasts in the short run. In conditions of health risks and measures taken to mitigate them, a drastic reduction of global demand is expected, a significant reduction in the prices of primary commodities on the world market, temporary disruption of global and regional supply chains, changes in population behavior, tightening of global financial conditions and investors risk aversion. The shock of the viral infection is expected to be short-lived and the main shock will be felt in the second quarter, after which a gradual normalization would be expected. Regarding the main channels of transmission to the domestic economy, the emergence of the new coronavirus is expected to affect confidence and expectations for future income, as well as access to finance, and thus greater restraint from consumer and investment decisions. Reduced foreign demand will affect the export activity of domestic companies. In conditions of limited movement and uncertainty, an important channel for transmitting shock are remittances, which are a significant inflow into the economy. In conditions of tight global financial conditions, risk aversion and deterioration of the performance of international corporations, effects on foreign investment are possible. Given the changes in the overall environment, certain changes compared to previous expectations are assessed also in the credit market dynamics, driven by both supply and demand for loans.

**In summary, for the period 2020-2022, the latest estimates point to pronounced, but still temporary effects on the domestic economy from the pandemic, mostly concentrated in 2020, which would be followed by normalization of economic flows.** Currently, the risks of the health crisis are pronounced, and refer to the possible infection prolongation and the measures to limit it in the second half of the year. These risks apply to both the global environment and the domestic economy. On the other hand, the formalization of our country's membership in NATO, as well as the decision of the European Commission to start negotiations for full membership in the EU, which took place in March this year, remain a positive risk. The latest April forecasts of the National Bank are being prepared and will incorporate all the latest available information and risks.

The National Bank continues to monitor developments, as well as potential risks to the domestic economy, in order to respond appropriately by adjusting policies and taking other, additional measures, if necessary.

## V. Monetary instruments

*In 2019, the operational monetary policy conduct took place in an environment characterized by continuing relatively high growth of free denar funds of banks, caused mainly by the National Bank interventions in the foreign exchange market. In such circumstances, and in order to enable flexibility and availability of liquid assets for more intensive lending to the private sector, the National Bank kept the amount of the underlying instrument unchanged. In managing the liquidity in the banking system, the National Bank applied the key interest rate, which was reduced once to 2.25%, with the interest rates of the other monetary instruments being at the historically lowest level.*

*The National Bank continues to implement monetary policy in conditions of excess denar liquidity of banks, which during the year was remarkably increasing. The banks' denar assets kept on going up throughout the year, reaching an all-time high (Denar 20,036 million) on an annual basis. The National Bank made the greatest contribution to this trend by purchasing only excess foreign currency on the foreign exchange market, which this year hit new record high (equivalent of Denar 24,566 million). The central bank presence in the foreign exchange market was mainly a reflection of the stable and relatively favorable changes in the supply of and demand for foreign currency by non-banking entities (Box - Foreign Exchange Market). Higher foreign currency supply in the economy was also attributable to the banks' active approach to invest part of their liquidity in products with FX clause that bring higher returns compared to other instruments in the domestic and international financial markets. The higher denar liquidity due to the interventions of the National Bank with market makers was partially offset by the growth of cash in circulation with relatively stable seasonal and annual dynamics, registering growth of Denar 3,498 million. At the same time, denar government transactions also reduced part of the banks' available assets, but their effect (by Denar 1,673 million) on the liquidity flows in period under observation was the weakest compared to other factors.*

*In the analyzed period, the National Bank was also involved in the banks' liquidity management by applying excess liquidity absorption instruments<sup>43</sup>. In the operational monetary policy implementation, the National Bank has still been using CB bills as a main instrument to signal monetary policy stance and to manage liquidity flows in the banking system. Thus, the CB bill rate in March was reduced by 0.25 percentage points, to a new record low of 2.25%. Monetary policy was eased reflecting the favorable foreign exchange market developments and stable expectations of domestic agents seen through the dynamics of total deposits. Policy rate remained unchanged by the year end, which corresponded with the assessment of adequate monetary policy stance. Along with the policy rate cut, lower interest rates were applied on both repo auctions for providing liquidity<sup>44</sup> and overnight credit facility<sup>45</sup>. On the other hand, interest rates on overnight and seven-day deposit facilities<sup>46</sup> remained low and unchanged at 0.15% and 0.30%, respectively.*

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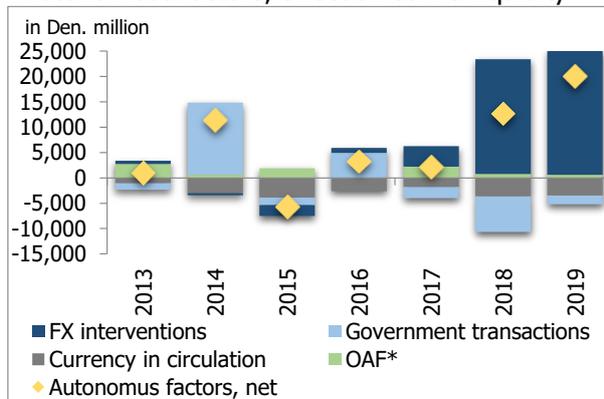
<sup>43</sup> The National Bank monetary instruments allowed banks to regularly use central bank liquidity through overnight credit facility and repo auctions for injecting liquidity in the banking system. However, given the high liquidity position, in 2019, the banks showed no interest in these monetary instruments.

<sup>44</sup> 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 CB bill interest rate.

<sup>45</sup> The interest rate on the overnight credit facilities is higher by 0.5 percentage points relative to the interest rate on the CB bills.

<sup>46</sup> 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.

Chart 59  
Autonomous factors, effect on banks' liquidity



\* OAF – other autonomous factors

Chart 60  
CB bills and banks' excess liquidity<sup>47</sup>

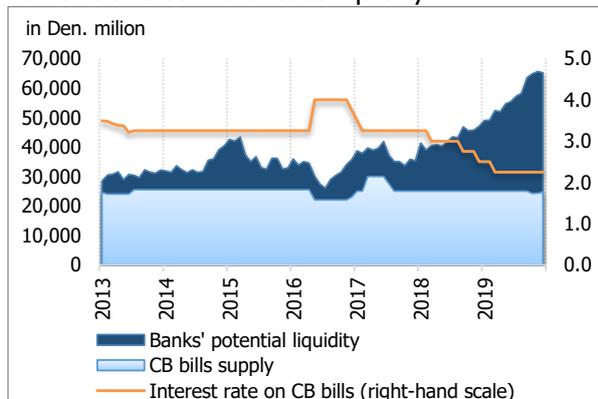
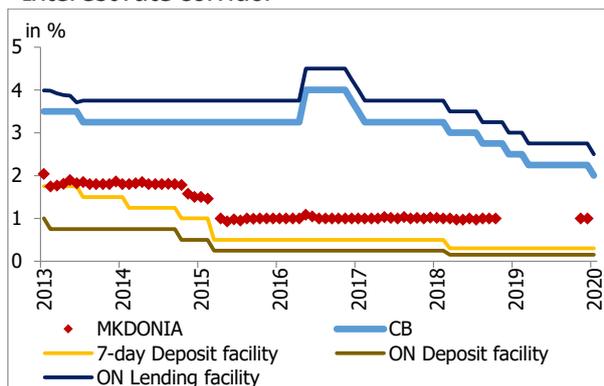
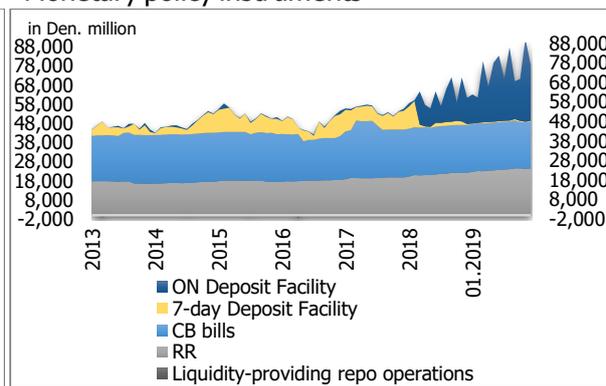


Chart 61  
Interest rate corridor



\* 7DF - seven-day deposit facility; OD - overnight deposit facility; OL - overnight loan facility  
Source: NBRNM

Chart 62  
Monetary policy instruments



Despite the upward trend of denar liquid assets in the banking system, in 2019 the National Bank offered the same amount of Denar 25,000 million<sup>48</sup> at all CB bill auctions, thus keeping the stock of this instrument relatively stable. Restriction on placements in the underlying instrument was intended to encourage banks to use excess funds to increase private sector funding. However, the cautious approach to private sector lending urged banks to continue investing a significant portion of excess cash in the National Bank deposit facilities. Such excess liquidity management also derives from the nature of deposit facilities that enable flexibility to short-term liquidity changes and high availability of funds for smooth domestic lending. Hence, the use of National Bank deposit facilities during the year was in line with the growth of excess denar funds in the banking system, due to which in the last quarter, highest amount of cash was invested in this instrument averaging around Denar 34,500 million. In terms of maturity, banks continued to use overnight deposit facilities, whose average stock was constantly increasing. Namely, in June, the funds invested in overnight deposit facilities for the first time exceeded the stock of CB bills, and by the year-end averaged about Denar 33,400 million, thus dominating the monetary instruments. On the other hand, banks

<sup>47</sup> The surplus of banks' liquidity refers to the first day of the reserve 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 NBRNM on that day as well as the claims on the money market, reduced by the money market liabilities and the level of reserve requirement for the forthcoming period.

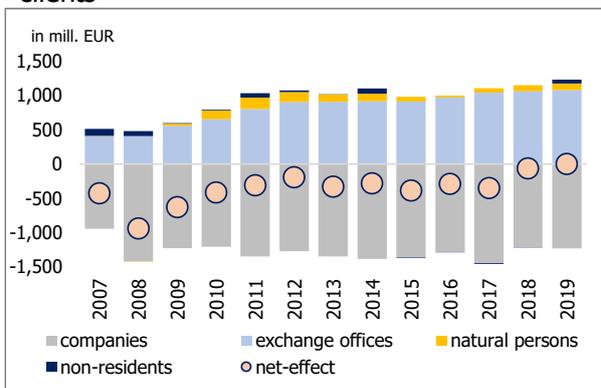
<sup>48</sup> At the CB bills auctions held on the first day of the reserve maintenance periods, volume tender was used (offered amount of the CB bills and fixed interest rate).

investment in seven-day deposit facilities during the year were relatively low and stable, averaging around Denar 680 million.

### Box 1. Foreign Exchange Market Developments and National Bank Interventions

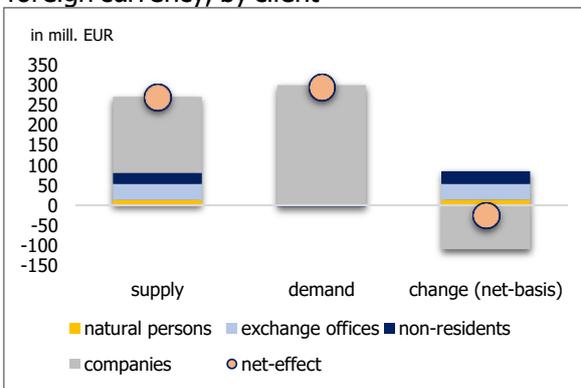
The total trading volume on the foreign exchange market<sup>49</sup> continued enhancing (Euro 9,581 million or 86% of GDP) in 2019, making this segment the most active and significant in the domestic financial markets. Additional feature of this market in 2019 was the continuation of the favorable trends present since 2018 seen through the stable and low net sale of foreign currency by banks for their customers<sup>50</sup> and enhancing liquidity on the interbank foreign exchange market.

**Chart 63**  
Net sale of foreign currency by banks for their clients

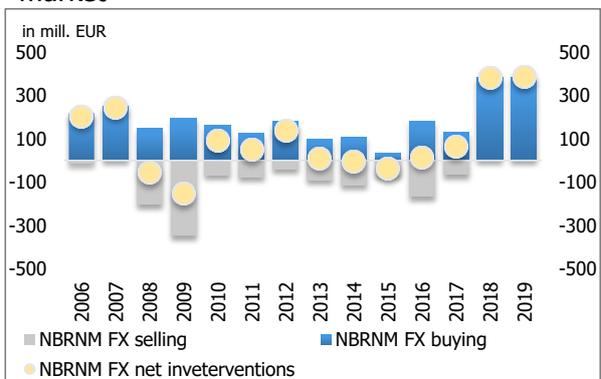


Source: NBRNM

**Chart 64**  
Annual growth of the supply of and demand for foreign currency, by client

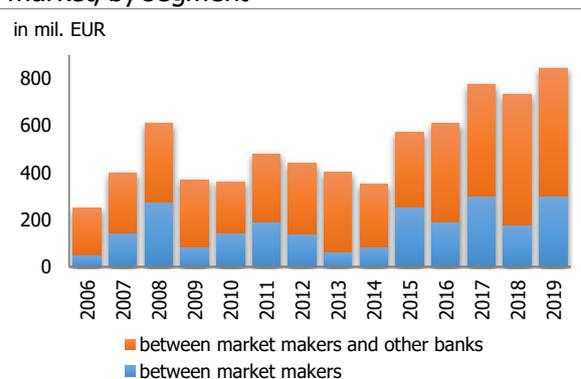


**Chart 65**  
NBRNM interventions on the foreign exchange market



Source: NBRNM

**Chart 66**  
Turnover on the interbank foreign exchange market, by segment



In the market where banks purchase and sale foreign currency for their customers, the net sale of foreign currency was relatively low (Euro 97.9 million) for the second year in a row, and almost four times lower than the average for the period 2007-2017, reflecting the combined effect of higher net demand for foreign currencies by the corporate sector and increasing net supply by other customers. Moderately higher net sale of foreign currency for the needs of the businesses (by Euro 110 million or total of Euro 1,336 million) resulted from the higher demand than supply of foreign currency and largely corresponded to the structure and dynamics of foreign trade and part of the capital flows of the country with abroad. Banks financed the net sale of foreign currency for the

<sup>49</sup> The foreign exchange market within this analysis encompasses the transactions between the banks and their clients and interbank trading.

<sup>50</sup> Bank customers are classified in the following four groups: businesses, exchange offices, households, non-residents.

corporate sector mainly from foreign currency inflows from transactions with exchange offices and natural persons. These entities that traditionally dominate on the side of the net supply of foreign currencies in the domestic economy made a larger supply of foreign currency this year as well (by Euro 53 million, reaching Euro 1,216 million). Non-residents also contributed moderately to higher foreign exchange inflows (by Euro 22 million, compared to the previous two-year period of net withdrawal of funds from the domestic economy), which is mainly related to their investments in the financial sector in the country.

Banks were managing the supply and demand for foreign currency liquidity from customers by using their own liquid foreign assets and by trading on the interbank foreign exchange market, where the supply of foreign currency was constantly higher. Excess liquidity on the interbank foreign exchange market partly resulted from the active foreign exchange liquidity management by banks, amid negative returns on financial instruments on the international financial markets. Besides diverting some of the available assets to instruments with higher yields in the international financial markets, this approach also included greater use of liquid assets in the domestic markets through placements in private sector loans with currency clause. Given such trends, the National Bank was constantly purchasing excess liquidity, and reached a new annual record high of Euro 399.65 million.

For the purposes of achieving the monetary policy goals, in 2019, the reserve requirement was again used for liquidity management. The National Bank did not make changes to the setup of this instrument, i.e. it still applies differentiated reserve requirement rates, which contributes to stimulating denar and long-term savings. The National Bank continues to apply a non-standard measure for reserve requirement, which was temporary and aimed at encouraging credit support to the export and the domestic energy sectors<sup>51</sup>.

In 2019, the banks' obligation to allocate funds with the National Bank on the basis of reserve requirement registered a relatively high annual growth of Denar 2,773 million, which corresponds to the solid growth of the banks' deposit base. This change largely reflects the stable increase in required reserve in denars (by Denar 1,992 million to Denar 24,253 million), which enabled partial absorption of part of the growing denar liquidity in the banking system. On the other hand, the growth of banks' required reserve in euros was twice as low as the previous year (equivalent to Denar 781 million) and at the end of the year amounted to Denar 17,232 million. Having unchanged reserve requirement rates, changes to this instrument reflect the movements in short-term banks' liabilities in terms of currency<sup>52</sup>, and to a lesser extent are related to the liquidity effect of the non-standard measure. The stable and solid growth of banks' denar short-term liabilities resulted from the higher households' preference to hold short-term denar rather than foreign currency assets with the banks. The effect of these changes was intensified by the stable growth of denar deposits of non-financial companies, amid moderate growth of foreign currency liquidity on their bank accounts, which partly reflects their need for higher net repayments of external operating liabilities. The households' search for higher interest rates, along with the differentiated rates of required reserve in terms of maturity<sup>53</sup> contributed to further growth of long-term savings, which is an indicator of further favorable developments in the maturity structure of banks' funding sources. This change is primarily seen through the nominal increase in long-term household deposits (over 2 years) and in denar savings with maturity of one to two years.

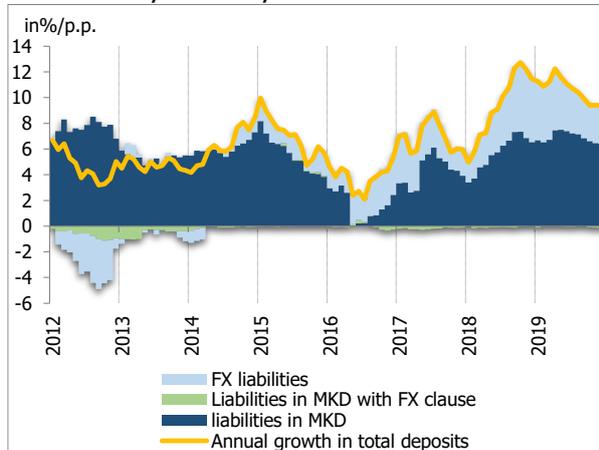
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<sup>51</sup> This measure released part of the required reserves that banks allocate to the National Bank, by reducing the denar liabilities base for the amount of new loans to net exporters and domestic electricity producers.

<sup>52</sup> Banks are required to allocate, with the National Bank, reserve requirement rate of 8% for denar liabilities, 15% for foreign currency liabilities and 50% for banks' liabilities in denars with FX clause.

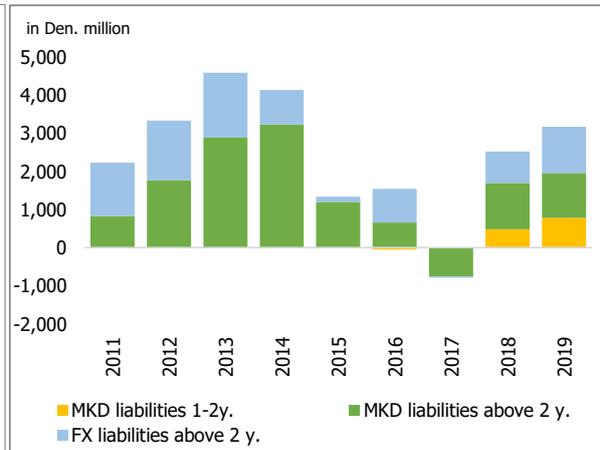
<sup>53</sup> To stimulate banks' long-term liabilities, the National Bank applies a reserve requirement rate of 0% on liabilities with maturities over 1 and over 2 years.

**Chart 67**  
Contribution to the annual growth of banks' liabilities by currency

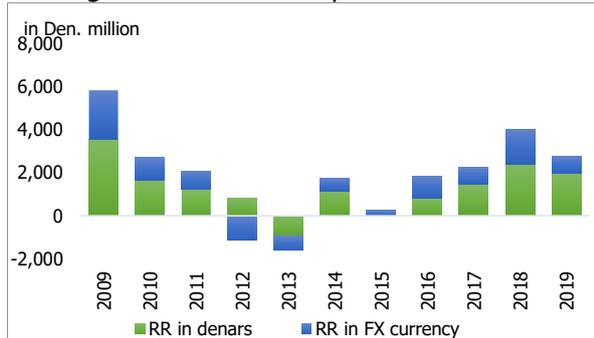


Source: NBRNM

**Chart 68**  
Annual growth of banks' long-term liabilities to households

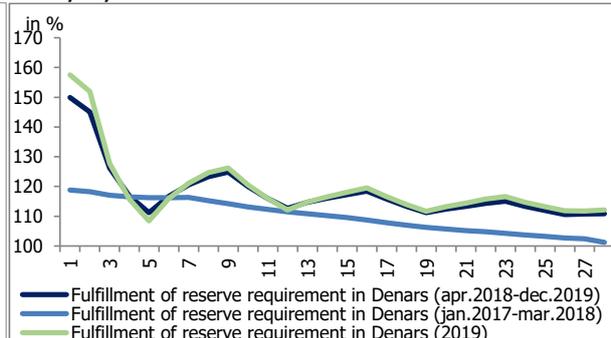


**Chart 69**  
Change in the reserve requirement of banks



Source: NBRNM

**Chart 70**  
Daily dynamics of reserve maintenance



In the analyzed period, the National Bank continued applying the non-standard measure for encouraging credit support to systemically important sectors in the economy. The stock of target loans was consistently relatively lower (loans granted to domestic electricity producers decreased by Denar 174 million, while financing of net exporters increased by merely Denar 1,563 million), compared to previous years. Such dynamics are mainly attributable to the moderate demand for loans from these sectors, customer risk assessment and the investment cycle nature, which is particularly important for lending to electricity producers. Hence, the indicators for the movements in the target loans pointed to gradual depletion of the stimulus effects of the measure, which was temporary, so that its implementation ended as of 31 December 2019.

In 2019, the banks started the reserve maintenance period with a relatively high amount of funds above liability in domestic currency, and the maintenance dynamics during the period was conditioned on the placements in overnight deposit facilities. Namely, banks' preference to keep part of excess funds during the working days on their regular accounts with the National Bank and the increased placements in overnight deposit facilities on the last day of the working session this year again contributed to cyclical reserve maintenance during the period.

## Box 2. Unsecured interbank deposit market and secondary market<sup>54</sup>

Given the high banking system liquidity, in 2019 banks had a very small and occasional need to borrow in the domestic financial markets. Analyzed by market segment, in 2019, banks offset the occasional short-term liquidity needs mostly in the unsecured interbank deposit market. This market registered lower volume and frequency of trading, so that the annual turnover reduced by 82% to Denar 7,064 million. Also, the lower need for borrowing influenced the average daily indebtedness of banks (Denar 128 million) which was almost five times lower compared to 2018. In addition to the relatively high denar liquidity, the trading maturity structure also contributed to reducing the volume of trading in unsecured interbank deposits in 2019. Banks provided the largest portion (79%) of the required funds with up to one-week maturity, so that for the second consecutive year these unsecured deposits significantly exceeded the overnight loans (which account for about 18% of total trading). Besides these two maturities, there were several transactions in unsecured deposits with up to one month maturity, whose share in total trading volume is relatively stable and low (3%). Interest rates on unsecured interbank deposits in 2019 did not change significantly. The average interbank interest rate on all transactions (MBKS) was 1.14% and was higher by 0.04 percentage points compared to 2018 due to the increased share of one-week unsecured interbank loans, which were executed at a stable interest rate (1.11%). Interest rate on unsecured overnight deposit facilities also remained unchanged (around 1%). Due to the occasional need to trade in unsecured overnight deposit facilities because of the high banking system liquidity, the increased preference to trade in one-week maturity and the decrease in the number of reference banks that participate in the calculation of SKIBOR and MKDONIA<sup>55</sup>, no transactions were executed in the first ten months of the year for calculation of MKDONIA. At the year end, only a few transactions were performed, which are used to calculate MKDONIA, whose level was still stable and unchanged (1.00%) compared to 2018.

Chart 71  
Turnover on the interbank uncollateralized deposit market

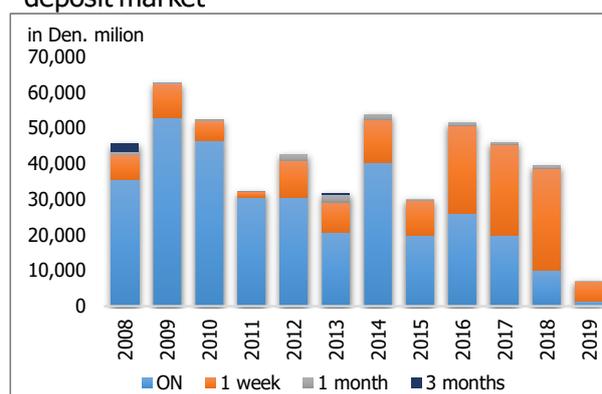
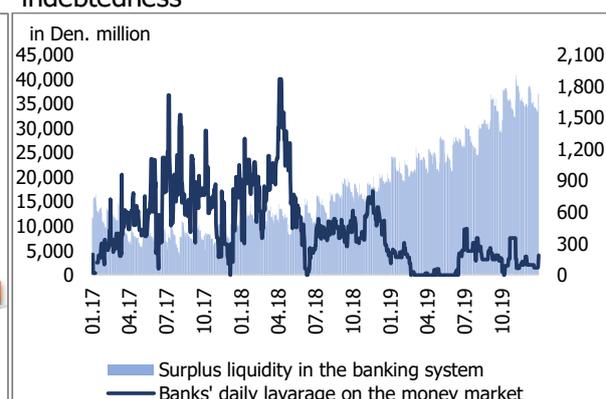


Chart 72  
Excess liquidity in the banking system and bank indebtedness



Source: NBRNM

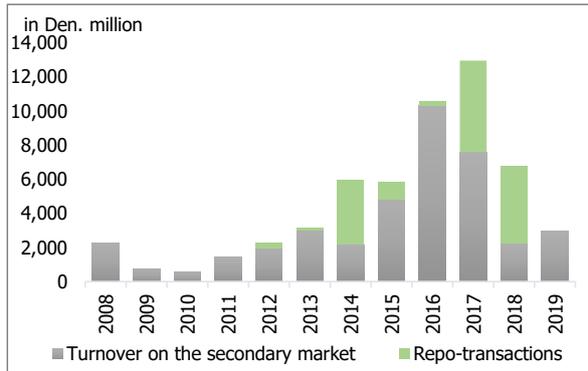
In 2019, the secondary market continued registering a downward trend in the volume of traded securities as a result of which total turnover halved (Denar 2,987 million) compared to the previous year. Analyzing types of transactions, this change was largely determined by the absence of activity on the interbank repo market segment, where given the excess liquidity, in 2019 no repo transaction was performed. Hence, the entire secondary market trading was made in outright transactions in securities, whose annual turnover was higher by 70%. In the total amount of traded government securities, the volume of trading in government bonds among banks was halved, which indicates that

<sup>54</sup> Money market analysis in North 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).

<sup>55</sup> As of 1.10.2018, new rules apply for calculating and publishing the interbank interest rate on the deposit market (SKIBOR), adopted by the Macedonian Banking Association in August 2018. With the new rules, the number of reference banks was reduced from eleven to six, due to the change in the reference bank selection criteria, namely the bank size (large or middle-size) criterion was replaced by systemically important bank criterion which was met by fewer banks, while maintaining the criterion on minimum share of a bank in the total turnover with uncollateralized and collateralized deposits.

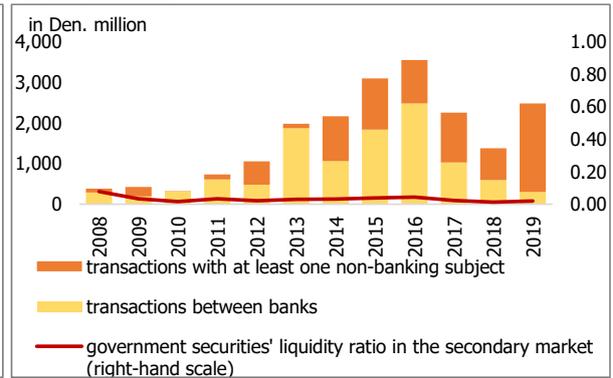
the need for financing in this market is low due to the high banking system liquidity. On the other hand, there is a significant increase in the volume and intensity of government bond transactions in which at least one participant is a non-banking entity, which corresponds to the extension of the ownership structure of these securities and their active application in the operational liquidity management. However, despite the increased trade in government securities on the secondary market, its share in the total amount of issued government securities is very low (0.02%), which indicates weak liquidity of these instruments on the domestic financial markets.

**Chart 73**  
Turnover on the secondary securities market



Source: NBRNM

**Chart 74**  
Structure of outright government securities transactions<sup>56</sup>



<sup>56</sup> Government securities liquidity ratio is the ratio between the turnover from government securities transactions on the secondary market during the year and the average stock of government securities issued in the same period.

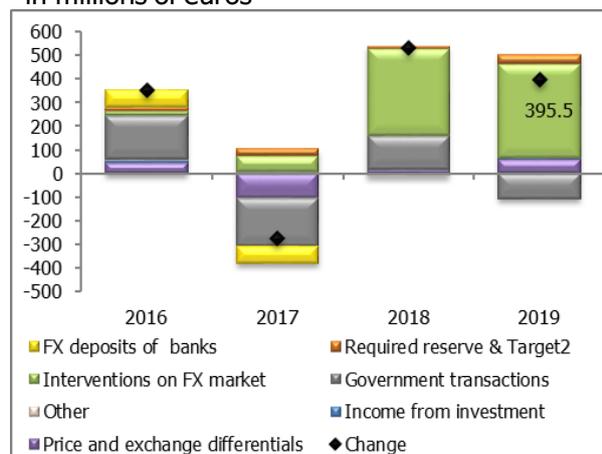
## VI. Foreign Reserves Management and Investment

In 2019, the foreign reserves of the Republic of North Macedonia (hereinafter referred to as: foreign reserves) registered relatively high annual growth for the second year in a row, which mainly resulted from the National Bank purchase of excess foreign currency on the domestic foreign exchange market. Given the constant growth of the stock of euro-dominant foreign reserves, the main challenge in managing and investing foreign reserves was their placement on the international financial markets amid negative interest rates on euro deposits and negative yields on debt euro securities. In such circumstances, in 2019, foreign reserves management was marked by flexibility and adjustment of investment decisions to the volatile international markets developments, which enabled adherence to the basic investment principles: safety, liquidity and profitability.

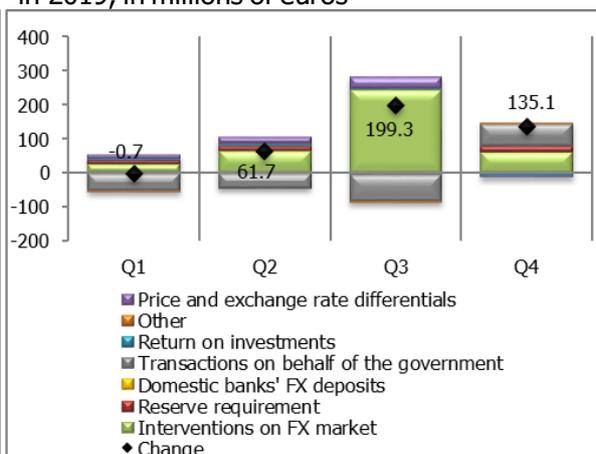
### 6.1. Foreign reserves stock and flow

During 2019, the foreign reserves registered a solid increase of Euro 395.5 million, reaching Euro 3,263 million at the year end. As in the previous year, the growth of foreign reserves was mostly due to the National Bank purchase of excess foreign currency on the foreign exchange market (of Euro 399.7 million), preserving the denar exchange rate stability. Additional contribution to the growth of foreign reserves of Euro 58.5 million was made by the positive price and exchange rate differences from the market valuation of the instruments in which the foreign reserves are placed. On the other hand, net government transactions with foreign countries, mainly outflows for external debt payment, reduced foreign reserves by Euro 108 million.

Chart 75  
Foreign reserves growth factors  
in millions of euros



Foreign reserves growth factors  
in 2019, in millions of euros



Source: NBRNM

Analyzing the dynamics, after the relatively stable movements in the first quarter, the foreign reserves were steadily increasing to the end of the year. The National Bank was purchasing excess foreign currency from the banking system all year round, with the highest amount purchased in the third quarter. Besides the seasonally favorable movements in the foreign exchange market typical for this quarter of the year, the domestic commercial banks' active foreign currency management policy, effective to the end of the year, contributed to increasing foreign currency supply aimed to reduce the effect of negative interest rates on the international markets. The foreign reserves growth due to withdrawal of excess foreign

currency from the domestic economy in the first three quarters of the year was moderately offset by outflows for government purposes, mainly payment of coupon interest on Macedonian Eurobonds in the amount of Euro 45.2 million in the third quarter. At the beginning of the fourth quarter, there was an inflow to the government account from the public finance development policy loan from the International Bank for Reconstruction and Development, in the amount of Euro 124.7 million, which increased the foreign reserves<sup>57</sup>.

## 6.2. Foreign reserves management guidance

*Foreign reserves investment allocation for 2019<sup>58</sup> was based on the expectations before the beginning of the year for normalization of the monetary policy of the European Central Bank (hereinafter: the ECB) and the anticipated financial risks related to the perceptions of low economic growth and geopolitical risks, including the US - China trade relations and political uncertainties in Italy and the United Kingdom. Namely, in anticipation of interest rate normalization by the ECB in the second half of the year, as well as the extremely low level of yields on government securities issued in the euro area, which does not provide adequate protection against interest rate risk, the forecasts required a cautious approach to foreign reserves tranche management<sup>59</sup>, which included low interest rate risk exposure (modified duration of 1 and 1.5 years for the euro liquidity and investment tranches, respectively). In line with the expectations of monetary policy shifts by the ECB, the year started with a moderately higher interest rate risk exposure (tactically modified liquidity and investment tranche maturities of 1.5 and 2 years, respectively), aimed to use the opportunity to invest in longer-term instruments at yields that were less negative compared to the short-term instruments. A return to modified duration of tranches was forecast for the second half of the year in order to prevent any market price decrease in conditions of expected yield growth.*

Expecting the US dollar to depreciate against the euro for the purposes of harmonizing economic cycles of the United States and the euro area, **the currency structure for 2019** envisaged maintenance of US dollar investment at about 8% of foreign reserves (excluding gold), i.e. at the level of forecasted revaluation reserves at the end of 2018. US dollar placements were also expected to be used to meet operating needs and generate higher revenues. In this light, for greater flexibility in currency risk management, no investment was forecast in the US dollar tranche for 2019. Consequently, it was forecast that the funds from this tranche, which fell due at the end of the year, be included in the liquidity tranche in US dollars. In line with expectations for a review of the form of cooperation with the World Bank<sup>60</sup>, the National Bank was expected to take over the tranche management from the World Bank in the second half of the year and to include the funds in the investment tranche for trading.

**Regarding the selection of instruments**, the allocation assumed investment of foreign reserves in fixed income securities issued by high quality issuers contained in the reference indices<sup>61</sup> as well as beyond them, and maintenance of investments in instruments of issuers from Spain, Italy and China. The investment tranche for trading in euros also included placements in deposits and other instruments on the money markets, as well as investments in inflation-indexed bonds in order to preserve the real purchasing power of

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<sup>57</sup> In this period, there were also outflows for the account of the government for external debt repayment.

<sup>58</sup> Tactical asset allocation of the foreign reserves is done prior to the beginning of each year pursuant to the Foreign Reserves Management and Investment Policy and Guidelines. During the year, a new tactical asset allocation of the foreign reserves would be considered if the new market circumstances require so. 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.

<sup>59</sup> For achieving the main goals of foreign reserves management and investment and in accordance with the time schedule of liquidity needs, foreign reserves are allocated to the following tranches: operational, liquidity and investment tranche.

<sup>60</sup> Since 20.6.2014, the National Bank has been part of the World Bank Reserve Advisory and Management Partnership (RAMP).

<sup>61</sup> The reference securities price indices contain real financial instruments issued by euro area countries with AAA to AA credit rating and modified duration corresponding to the modified duration of tranches.

investments (in the case of significant inflationary pressures during the year). The gold was envisaged to be deposited in short-term deposits with foreign commercial and central banks and to be managed by concluding swap transactions, if there are favorable market conditions.

### 6.3. International financial markets and foreign reserves investment in 2019

*Contrary to the expectations for normalization of the monetary policy of the most influential central banks, the changing global political environment in 2019 led to growing concerns about the global economic contraction, due to which central banks continued to pursue expansionary monetary policies. During the year, the development of trade relations between the United States and China had the greatest impact on the changing trends in international financial markets.* The first three quarters of the year were marked by heightened caution among financial market participants over expectations of global economic slowdown, especially in the manufacturing sector, and over the retreat from expectations for further monetary policy normalization, mainly due to the escalation of the trade dispute between the United States and China<sup>62</sup>, as well as the current uncertainty over Brexit and the geopolitical tensions.

The easing tone of the largest central banks, followed by downward revisions to economic growth by relevant international institutions, contributed to strong demand for safe medium-term and long-term instruments by investors in international financial markets in the first three quarters of the year. Thereby, the yields on debt instruments that contain higher credit premiums registered a sharper decline compared to the yields on the safest bonds issued by euro area member states, which were reduced to the lowest levels during the year. The above narrowed the price gap between higher-yielding instruments and the safest government securities to all-time low. In such conditions, **interest rate exposure of tranches decreased moderately**. At the same time, the National Bank reduced investment in riskier instruments, directing the new investments mainly to instruments issued by German regional governments and German collateralized bonds, as well as short-term instruments issued by commercial banks. However, in the second half of June, after the ECB and Fed announced readiness for additional monetary stimulus, the **interest rate exposure of tranches gradually increased**. The commitment to maintain moderately higher interest rate risk exposure was in line with the market environment which indicated increased prospects for decelerating global economic growth and consequently, lower yields on medium- and long-term debt instruments. The investments were mainly focused on longer-term government securities, while placing funds in shorter-term commercial bills and certificates of deposit.

As previously announced, in the September monetary policy meeting, the ECB adopted a package of expansionary measures to support the euro area economy. The measures included a 10 basis points deposit rate cut to -0.50%, resumption of the Euro 20 billion-a-month securities redemption program and implementation of a two-tier system for remunerating excess reserve holdings<sup>63</sup>. Since market participants incorporated most of these measures into their expectations, yields in the euro area did not change significantly.

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<sup>62</sup> In May, the US administration increased tariffs on Chinese imports, followed by an increase in tariff barriers by the Chinese government. Afterwards, in August, the United States announced an increase in tariffs on additional Chinese imports, covering all imports of goods from China, to which the Central Bank of China retaliated by allowing the value of the Chinese yuan to depreciate above the level of 7 yuan per US dollar.

<sup>63</sup> On 30 October 2019, the ECB introduced two distinct rates applicable to different parts of the excess reserve holdings. Thus, the part of reserve holdings in excess of minimum reserve requirements held in reserve accounts with the Eurosystem are remunerated at 0%, while the remaining excess reserve holdings and the part placed in ECB's deposit facilities continue to be remunerated at the deposit facility rate or 0%, whichever is lower.

The Fed's monetary policy was also accommodative. During the year, the Fed reduced the target level of interest rates on three occasions (at the meetings in July, September and October), by 0.75 percentage points cumulatively, in order to support economic growth and encourage inflation increase. The US government debt prices registered the strongest increase compared to the growth of government bond prices of other developed economies. The decline was more pronounced in long-term securities yields which were lower than the short-term securities yields (inverted yield curve). The presence of central banks in the financial markets through stimulus measures, increased stock market indices, amid expectations that monetary policies easing would prompt economic activity.

Chart 76  
Yield curves on government bonds  
in %

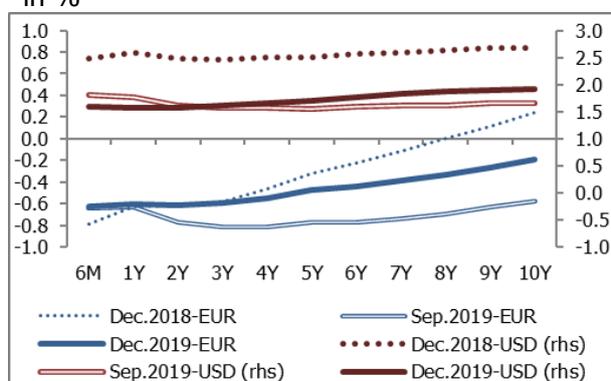
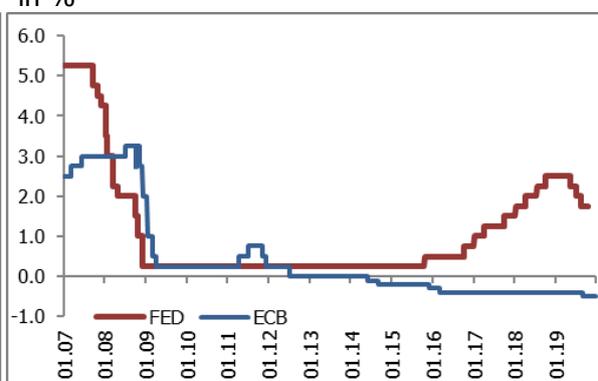


Chart 77  
Policy rates  
in %



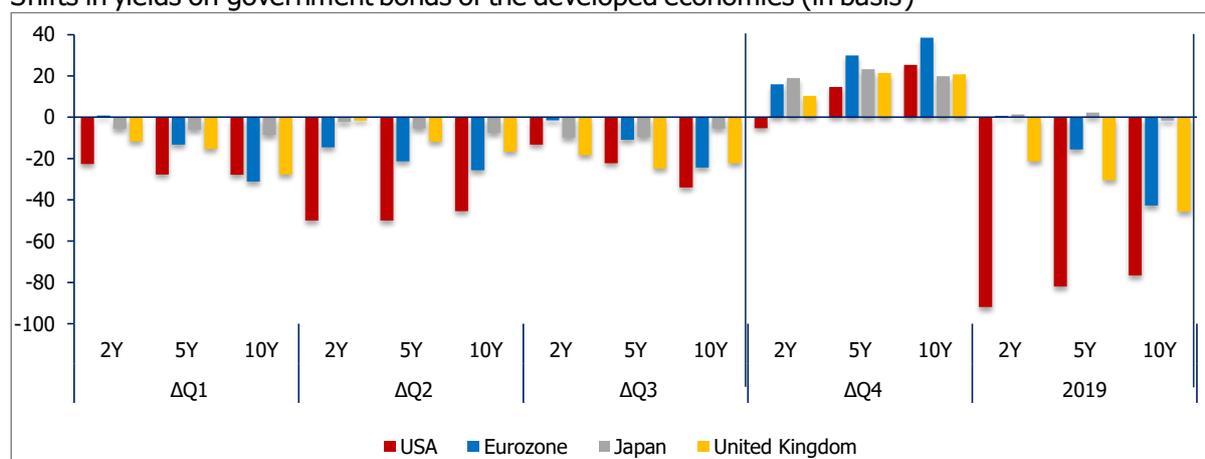
Contrary to the first three quarters, in the last quarter of 2019, global financial markets saw an uptrend in returns, mainly due to the optimistic perceptions of the first phase of the US-China trade deal. In such conditions, as well as due to the growing expectations that the British Parliament will manage to implement the Brexit agreement and avoid a disorderly exit from the euro area, investors abandoned the expectations of downside risks to the global economic growth. Consequently, government bond yields in the euro area, same as the higher yielding instruments in euro, significantly increased, mainly in the medium and long-term instruments. In addition, increased propensity of investors to invest in higher credit risk instruments further narrowed the spread between their yields and the yields on safer (primarily German) government securities. Given the changing market conditions, the National Bank was constantly applying a flexible approach to foreign reserves investment, pursuing with the investment strategy of combining investments in short-term instruments in euros (up to 3 years) issued by commercial banks and medium-term government bonds (5 and 6 years).

Positive investor outlook on U.S. - China trade relations in the fourth quarter boosted 3 to 10-year US dollar-denominated securities yields, while short-term yields declined. The shifts in short maturities mainly reflected the presence of the Fed with transactions on the repo market<sup>64</sup> as well as the built-in expectations for further monetary policy easing in 2020. However, the low yield on long-term instruments did not provide sufficient protection against interest rate risk, so the National Bank placed the US dollars in short-term instruments in the money market.

However, in most developed countries, financial instrument yields were declining throughout the whole year, i.e. the growth in the fourth quarter was not sufficient to offset the decline in yields in the first three quarters.

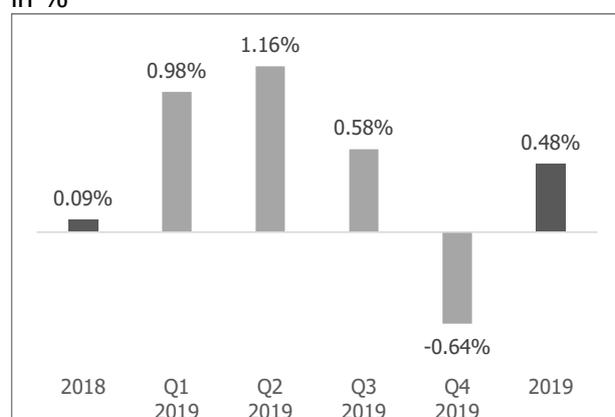
<sup>64</sup> Since the second half of September, the Fed has been conducting reverse repo transactions (for the first time since the 2008-2009 financial crisis) to inject liquidity and reduce interest rates in money markets. The lack of liquidity resulted from the withdrawal of funds by companies for corporate tax payment in the middle of the month, government securities auctions and sale of securities in the bond markets by investors to dealers.

Chart 78  
Shifts in yields on government bonds of the developed economies (in basis)



*The foreign reserves investment performance is mostly due to the market conditions at the moment of investing, as well as to the benchmarks that serve as investment guidance.*

Chart 79  
Foreign reserves return rates  
in %



Source: NBRNM

**2019**, which besides income includes changes in securities prices and exchange rate differentials stemming from foreign currency transactions, was **0.48%**, which is significantly higher compared to previous year (0.09%).

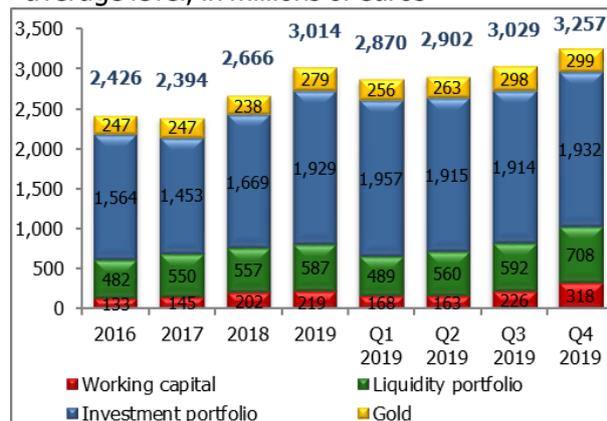
Analyzed by tranche, the operational tranche has an adverse effect on foreign reserves investment revenue, given the need to maintain immediately available funds in euros<sup>65</sup>. The return on this tranche, however, was less negative than the return on the benchmark. The average level of the operational tranche increased during the year, having in mind that the assets from the purchase of foreign currency from the market makers and the inflow for the government from external borrowing were temporarily kept in the current accounts until invested.

Liquidity and investment tranches in euros, which besides the safest instruments also included investments in securities that offer credit premium, registered positive rates of return under the influence of instruments price movements. In contrast, the performance of the

<sup>65</sup> Funds within the operational tranche, due to their function, are primarily placed in current accounts with the central banks, where negative interest rate of -0.40% was applied until 11 September, and after the cut of the deposit interest rate by the ECB it was reduced to -0.50%. However, in order to limit the adverse effect on revenues, part of the funds are kept in current account with commercial banks, in an amount for which these banks do not charge negative interest.

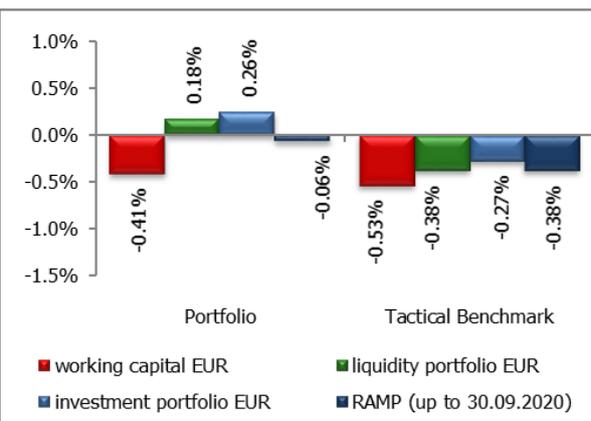
respective benchmarks, which contain only the safest instruments with significant negative returns, was negative. In the second half of the year, the average level of the liquidity tranche increased to the higher forecasted amount<sup>66</sup> by transferring assets from the operational and investment tranches. The level of the investment tranche that aims to increase the return on foreign reserves and finance contingencies in the long run remained the highest within the foreign reserves.

Chart 80  
Foreign Reserves Tranching  
average level, in millions of euros



Source: NBRNM

Return rates by tranche in 2019

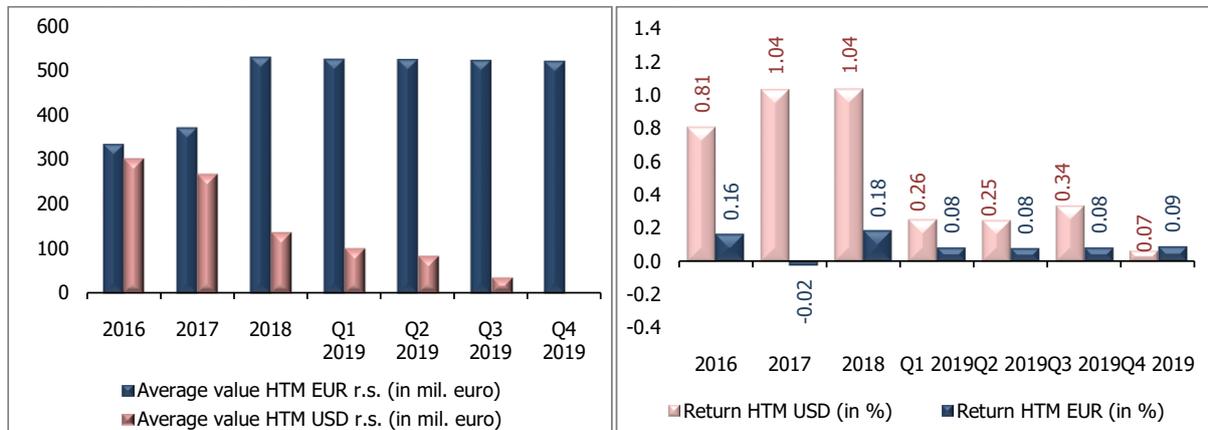


Source: NBRNM

*To reduce interest rate risk exposure, some of the invested securities within the foreign reserves are recognized as held-to-maturity, which according to their features have a predictable and stable return.* The level of held-to-maturity tranche in euros remained almost unchanged during the year. This tranche achieved positive results, due to the investment in government bonds issued by peripheral euro area member states, with a relatively high positive yield to maturity. The performance of the held-to-maturity tranche in euros is still lower compared to the performance of the tranches for trading, given that the return on these tranches largely resulted from the growth of the market price of the instruments. For greater flexibility in managing currency risk and ensuring regular and stable returns, assets maturing within the investment held-to-maturity tranche in US dollars were diverted to the liquidity tranches in US dollars, where they were placed in short-term money market instruments. This diversion of assets gradually reduced the residual maturity of the held-to-maturity tranche in US dollars until its full maturity to the end of the year.

<sup>66</sup> The level of liquidity tranche is forecasted on the basis of the expected outflows from the foreign reserves in the next twelve months.

Chart 81  
Held-to-maturity tranche in 2019  
in millions of euros



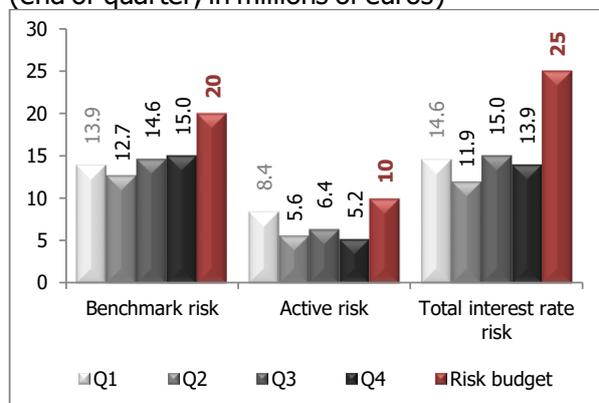
\*HTM, Held-to-maturity  
Source: NBRNM

**Interest rate risk management**, besides through the modified duration and HTM securities investment, **is also monitored in terms of limits on the interest rate risk tolerance**<sup>67</sup>, which during the year was kept within the limits, which suggests that the investment strategy is appropriate. In 2019, the total interest rate risk, as well as the interest rate risk of the benchmarks and the active interest rate risk were within the limits. The active interest rate risk mitigated during the year, as a result of the increased share of investment in securities contained in the benchmarks.

The active approach to foreign reserves management included implementation of securities strategies, as well as futures contracts related to the expectations for the movement of credit spreads in the euro area, the shifts in the yield curves in the United States, and the future path of policy rates of the global central banks. However, it is extremely difficult to take up position on future interest rates and yields movements in financial markets where the greatest shifts happen under the influence of the geopolitical decisions of the most influential economies, such as the trade war between the United States and China.

Thus in the second half of the year, futures contracts were used to a much lesser extent within the foreign reserves tranches.

Chart 82  
Value exposed to interest rate risk  
(end of quarter, in millions of euros)



Source: NBRNM.

*The currencies and the gold price in the international financial markets were much more volatile than the interest rate variability during the year, due to which the exposure to currency risk was a challenge to the foreign reserves management. The breakdown of foreign reserves by currency<sup>68</sup> was made according to the guidelines given with the tactical asset*

<sup>67</sup> 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 not more than 1% with a probability of 95% during the investment period of one year.

<sup>68</sup> The currency structure is analyzed taking into account the stock of foreign reserves reduced by the amount of gold.

allocation of foreign reserves, and with the primary purpose of supporting the denar/euro exchange rate targeting as a monetary strategy of the National Bank. Subsequently, assets invested in financial instruments denominated in euros prevail in the foreign reserves, with an average share of 93% in 2019.

The expectations for depreciation of the US dollar in 2019, as a criterion for an acceptable level of currency risk, led to retention of the investments in US dollars at a low level. Unlike these initial expectations, trade and geopolitical tensions caused an increased demand for this currency as a safe instrument, whereby the US dollar appreciated by about 2.1% against the euro on an annual basis. The lower value of the euro was also due to the weaker indicators for the euro area, given the growing concern that the escalation of the trade relations between the USA and China will be negatively reflected on the export sector of the euro area, and consequently on the economic growth.

Chart 83  
Currency structure of the foreign reserves  
annual average



Source: NBRNM

Chart 84  
Movement of Euro/USD currency pair and price of gold



*The principle of safety of foreign reserves investments is of supreme importance in determining the National Bank investment strategy.* In accordance with the investment strategy, most of the foreign reserves or an average of around 60% were invested in financial instruments with the highest credit rating ("AAA" to "AA-") i.e. with the lowest credit risk exposure. To maintain the value of foreign reserves, considering the negative yields on debt securities, most foreign reserves investments or 30% on average were directed in instruments with credit rating ranging from A+ to A-, which were also characterized with high safety and enabled moderately positive return on assets. Most of these instruments have shorter maturity and are issued by renowned commercial banks. A small portion of the investments within the portfolios in euros were directed towards instruments that have moderately lower credit rating, but are issued or are unconditionally guaranteed by member states of the euro area and enjoy the benefits of the easing policy of the ECB. All investments within the portfolios of the foreign reserves are in accordance with the criterion for having an investment credit rating. Observing 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.

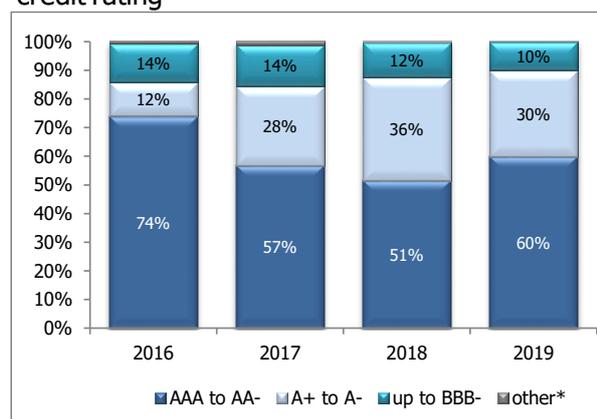
*Geographically, most of the foreign reserves investments are directed towards euro area core countries<sup>69</sup>, but the negative yields of these instruments on the European markets conditioned exposure to other euro area and EU member states.* During the year, the investments in the category euro area core member states (EC) increased largely

as a result of investment in government securities and securities issued by commercial banks

<sup>69</sup> The so-called euro area core member states include Germany, Austria, Luxembourg, Finland, the Netherlands, France and Belgium; other euro area and EU member states include Sweden, Lithuania, Poland, Czech Republic and Slovenia.

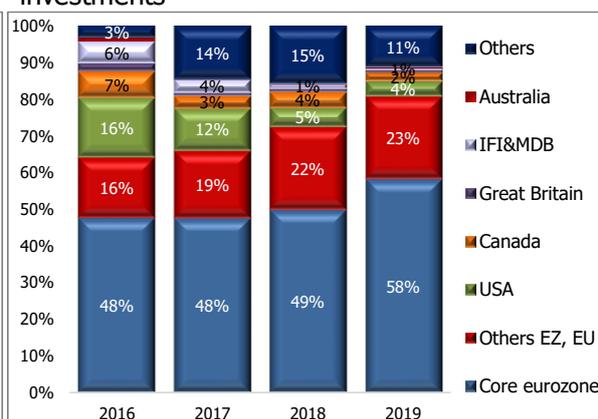
of France and the Netherlands. On the other hand, a moderate decline was registered in the investments in the category others, compared to last year, primarily due to the reduced placements in short-term money market instruments (securities and deposits) in renowned commercial banks from China, given the heightened global trade tensions.

Chart 85  
Average annual structure of investments by credit rating



\*IMF, BIS are classified in the category others  
Source: NBRNM

Chart 86  
Average annual geographical structure of investments

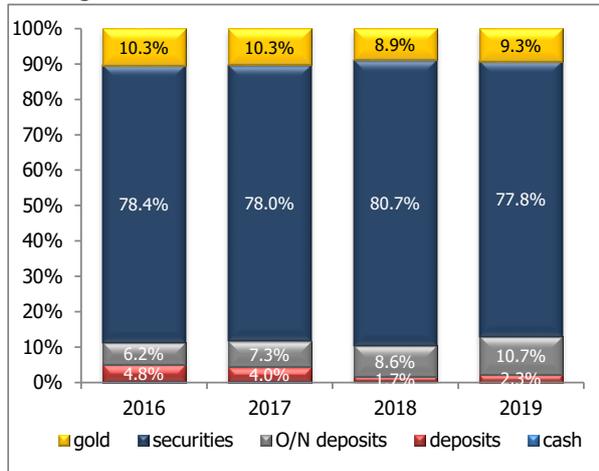


\*IFI and MDB - international financial institutions and multilateral development banks

*The commitment to ensure safety and liquidity of the investments of the foreign reserves, was registered also with the structure by financial instruments. Namely, **securities** dominate in the invested foreign reserves, with an average share of about 78%. Moreover, in order to maintain appropriately adjusted duration of the portfolios in euros, the longer-term investments in government securities were combined with investments in short-term commercial bills and certificates of deposits, as well as corporate bonds issued by first-class foreign commercial banks, whereby this category had an average share of about 25% in the structure by securities. The exposure to the commercial banks moderately increased compared to last year, but the structure of issuers of this type of securities also changed. Moreover, unlike the previous year, when the commercial banks from China prevailed, higher share was recorded in the commercial banks from the euro area and the systemically important institutions for which there are stricter criteria for the financial indicators and a higher probability of support by the government, relative to the other commercial banks. The share of investment in securities issued by the regional governments of Germany, Australia and Canada was also significant (7.3%) same as the investment in securities with implicit government guarantee (6.1%), which despite the high safety level provide higher yields compared to government securities. Also, during the year, the investments in collateralized securities increased, which had a share of about 4.2% in the structure by securities. Taking into consideration the deep negative yields on the government securities in the euro area, as well as the obligation for preservation of the safety of the foreign reserves, the scope of eligible types of collateralized securities and their issuers also increased in the fourth quarter. A small portion of the investments was directed towards securities issued by multilateral organizations<sup>70</sup> with an average share of 0.1% in the securities.*

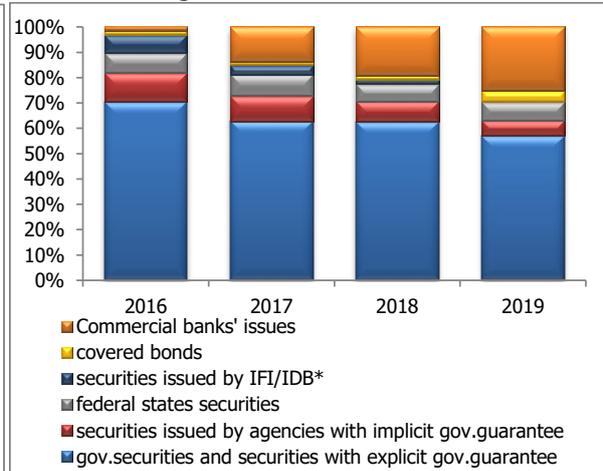
<sup>70</sup> Security issued by the European Company for the Financing of Railroad Rolling Stock (EUROFIMA).

Chart 87  
Investment structure, by instrument  
average in 2019



Source: NBRNM.

Chart 88  
Structure by type of securities  
annual average



Part of the foreign reserves were also kept in the current accounts (around 10.7% on an average) as part of an operational tranche. In order to optimize costs, besides on the accounts with the central banks, part of the funds were also kept in current accounts with foreign commercial banks. Deposits<sup>71</sup> were also placed with the foreign commercial banks, mainly within the liquidity and operational portfolio, whereby their share moderately increased (on average, from 1.7% in 2018 to 2.3% in 2019), according to the favorable market conditions for redirecting funds that were kept in central banks. The increase in the share of deposits in the structure by instruments was also a result of the full maturity of the portfolio of securities held to maturity in US dollars, after the funds were placed in deposits within the liquidity portfolio in US dollars.

Gold, which is usually a financial instrument with a lower market return has still been placed in short-term deposits with first-class foreign commercial banks. Within the structure of the foreign reserves, the average share of gold registered a moderate increase from 8.9% in 2018 to 9.3% of the foreign reserves in 2019, which, amid unchanged quantity (221,786 ounces), was completely a result of the increase in its price. Namely, amid increased interest of global investors to invest in safer financial instruments, including the gold, the price of this precious metal reached the highest level in the last 6 years, amounting to US Dollar 1,523 per ounce at the end of 2019, compared to US Dollar 1,282 per ounce at the end of 2018.

Regarding other foreign reserves operations, the National Bank continued with securities lending by simultaneously concluding one-month repo and reverse repo operations. In repo transactions, securities were temporarily borrowed from the portfolios in euros and US dollars, and high-quality securities eligible for investment, in accordance with the Foreign Reserves Management and Investment Guidelines, were accepted as collateral. During the second half of the year, repo operations were concluded only with securities in euros, in conditions of lower share of securities in US dollars within the investment portfolio to maturity. In order to compensate part of the accounts maintaining and custody fees, the National Bank continued using depositories' services for **automatic securities lending**.

<sup>71</sup> The placements in deposits within the portfolios of the foreign reserves are limited to maturity up to one year, i.e. up to two weeks for the operational portfolio.

### **Box 3. Activities related to improving the institutional capacity for foreign reserves management**

Within the TAIEX program under the auspices of the European Commission, in June, an expert mission of representatives of the Hungarian National Bank was organized, titled Application of derivative instruments in the active management of the portfolios of the foreign reserves. The purpose of the mission was to contribute to the improvement of the knowledge of the advantages and risks when using different types of derivative instruments by sharing the experience of the experts from the Hungarian National Bank in the application of derivative instruments in the foreign reserves management. During the mission, the characteristics of individual derivative instruments (swaps and options) were discussed, in terms of their application in the active and passive management of the foreign reserves. Approaches for management and monitoring of the risks, the valuation and reporting when using the various derivative instruments were also presented. The acquired knowledge of the options as a derivative instrument and the possibility for generating additional income would be applied in the analysis of the usefulness of introducing the options within the management of the foreign reserves in the National Bank.

The mission within the Reserves Advisory and Management Program (RAMP) was also on a similar topic, where the advantages and manner of applying the foreign exchange and interest rate swaps and the options were also discussed with experts from the World Bank, in the active management of the portfolios of the foreign reserves. During the mission, the operational risk in the foreign reserves management process was also covered, thus revising the current setup of monitoring of the operational risk, and guidance on its upgrading and improvement were provided.

Regarding the cooperation with the World Bank and the use of the Reserves Advisory and Management Program (RAMP), during the year, the National Bank re-examined the benefits and the manner of cooperation with this international institution. Moreover, in addition to the significant progress in the implementation of the individual activities within the foreign reserves management, the dynamics of incorporating the recommendations and the acquired knowledge of the employees in the regular operations was also analyzed. Taking into consideration the results achieved so far and the future perspectives, it was concluded that it is most appropriate for the Continuous Learning Program - CLP from 1 October 2019 to be replaced with Technical Advisory Services - TA, which encompasses less trainings and leaves room for application and incorporation of the already developed concepts in the period ahead.

## VII. Payment systems and payment services

The development of a modern and inclusive market of payment services, in accordance with the needs of users for a wide spectrum of payment instruments and innovative ways of initiating payments, depends on the legal framework and the security and efficiency of the payment infrastructure. Moreover, the role of the NBRNM is crucial for the safe and efficient execution of payments. Namely, the NBRNM is the operator of the Macedonian Interbank Payment System (MIPS)<sup>72</sup> for large and urgent payments in denars between its participants, used to settle the payment transactions related to the implementation of monetary policy, to the provision of cash to banks, to make the final settlement of the transactions of the other payment systems, the settlement of the transactions with securities, as well as of the transactions for the government and the government authorities and the other participants in the system. At the same time, the NBRNM has supervisory competences over the operations of the payment systems, as well as of the banks and of the other entities that provide payment services in the country, as well as a regulatory role aimed at improving the legal framework for payment services and for the operations of the payment systems. In this regard, during 2019, the NBRNM undertook a series of activities for the safe and efficient execution of payments within its competences, as well as activities for improving the payment services and payment infrastructure in the country and further harmonization of the national regulation with the legislation of the EU, in cooperation with the Ministry of Finance.

### 7.1. Harmonization of the national with the European legislation

During 2019, within the activities for harmonization of the national with the European legislation in the field of payment services and payment systems, the NBRNM and the Ministry of Finance finalized the draft version of the Law on Payment Services and Payment Systems which transposes the main acts<sup>73</sup> of the legislation of the EU in this area. The main purpose of these activities is to establish a completely new legal framework, significantly harmonized with the European legislation and the European work standards, which should enable the entry of new payment service providers on the market and create conditions for competition from the fintech-sector by offering new advanced solutions for making payments. Amid such an enriched offer of payment services, it is expected an intense competition and a reduction in the prices of payment services, as well as raising the quality of services, providing also a higher degree of protection of users.

For the purpose of complete and timely involvement of the stakeholders, the NBRNM and the Ministry of Finance during the year held several working meetings with the stakeholders about the draft version of the Law on Payment Services and Payment Systems, simultaneously providing them with open and interactive communication through three public debates.

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<sup>72</sup> MIPS - the Macedonian Interbank Payment System is a real-time gross settlement system (RTGS) of denar payments and is mainly used for high-value and urgent interbank payments.

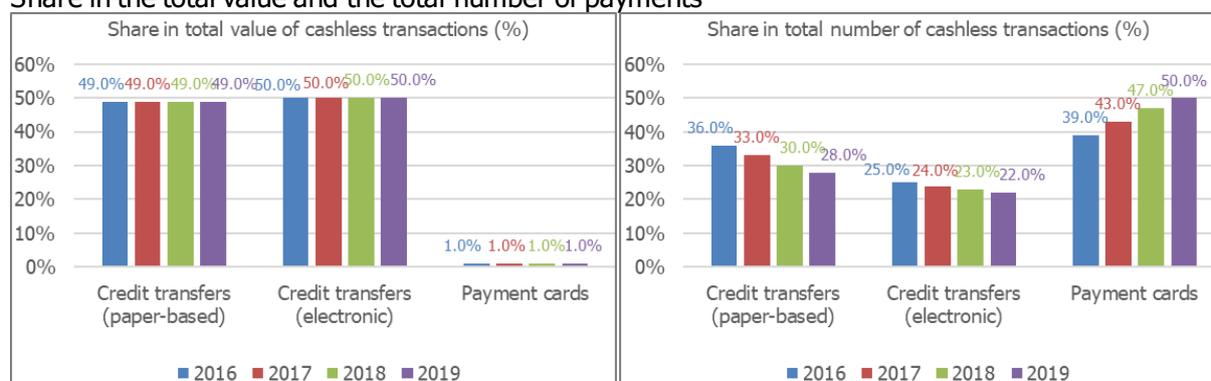
<sup>73</sup>The Directive on payment services in the internal market (2015/2366/EU), the Directive on settlement finality in payment and securities settlement systems (98/26/EU and 2009/44/EU), the E-Money Directive (EMD2 2009/110/EC), the Directive on the comparability of fees related to payment accounts, payment account switching and access to payment accounts with basic features (2014/92/EU), some of the provisions of the Fifth directive on anti-money laundering and combating the financing of terrorism (2018/843) which refer to the establishment of a national register of accounts and safes, the Regulation on interchange fees for card-based payment transactions (2015/751) and the Regulation establishing technical and business requirements for credit transfers and direct debits in euro (260/2012), in the part of the provisions related to direct debits.

## 7.2. Payment operations realized with cashless payment instruments

The total value of domestic payments<sup>74</sup> in 2019 registered an annual growth of 6.5% and reached Denar 4,062 billion from 127 million transactions and annual growth of 12%. Moreover, the structural shares of the cashless payment instruments in the total value of payments remain relatively stable as in the past period, so that most of the value of transactions (98.6%) is performed with credit transfers (amid slightly higher share of credit transfers initiated electronically relative to credit transfers initiated in paper-based form), and only 1.4% of the value is realized by using payment cards.

A change in the structure of payments is noticed in the number of transactions realized with the individual cashless payment instruments. Thus, in 2019, the number of transactions with payment cards kept on increasing, reaching a share of 50% in the total number of payments (growth in the share of 3 percentage points on an annual basis), at the expense of the reduced share of transactions with credit transfers initiated in paper-based form (28%) and initiated electronically (22%). Changes in structure still indicate gradual change in the habits of citizens and companies in order to enjoy the benefits of digitalization on the payment services market.

Chart 89  
Share in the total value and the total number of payments



Source: NBRNM

### 7.2.1. Credit transfers

The total number of credit transfers in 2019 was 63.6 million, which is an annual growth of 5.2%.

The structure of credit transfers, in terms of user, is still predominated by legal entities with 70%, while, the rest of 30% are initiated by natural persons. Moreover, for execution of the payments with credit transfer, citizens generally, or 78% used the banks' counters, and from those who preferred electronic channels, 75% used the personal computers, 24% the mobile phone application, and only 1% used the ATM for that purpose. Unlike natural persons, legal entities predominantly, or 54% of the total credit transfers, made them electronically. From the electronic channels, same as citizens, legal entities also predominantly use the personal computer, as much as with whole 99%, and only 1% used the mobile banking applications for that purpose.

<sup>74</sup> Payments refer to transactions of legal entities and individuals (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. Also, despite the legal possibility, E-money transactions do not exist.

Table 3  
Credit transfers as cashless payment instrument for natural persons and legal entities

Number of credit transfers (structural share)	Natural persons	Legal entities (%)
<i>By method of initiation</i>		
Paper-based	78	46
electronic	22	54
<i>By device of initiation of the electronic credit transfers</i>		
PC	75	99
Cell phone	24	1
ATM	1	/
<i>Standing orders to total credit transfers ratio</i>		
	18.3	0.2
<i>Forced collection decisions to total credit transfers ratio</i>		
	0.63	0.61

Source: NBRNM

While the electronically initiated payment is increasingly used in the country for its efficiency, the comparative data show that the Republic of North Macedonia has a relatively lower structural share in the electronically initiated credit transfer transactions (44.2%), compared to the the old EU<sup>75</sup> member states from CESEE<sup>76</sup>, where the share of

electronically initiated credit transfers in the total number of credit transfer transactions is 92% and 88%,<sup>77</sup> respectively.

### 7.2.2. Payment Cards

The total number of transactions with payment cards issued by domestic issuers on POSs in the country in 2019 was 92 million, which is an annual increase of 14%. Moreover, also this as well as the past years, the number of POS transactions grows, whereby their share in the total number of transactions has increased by 3 percentage points and reaches 67%, at the expense of the reduced share by 4 percentage points of the transactions for ATM cash withdrawals. In parallel, growth was also registered in their use of the domestic virtual (Internet) points of sale, but the share is still relatively low, and the use of these cards for ATM cash deposits in the country is also small.

In 2019, 7 million transactions (annual growth of 25.7%) were performed with payment cards issued by foreign issuers, at terminals located in the country. These payment cards also register an increasing use for payments at POS terminals (share of 78%), amid a reduced use for ATM cash withdrawals and a still insignificant use for payment at the domestic virtual (Internet) points of sale.

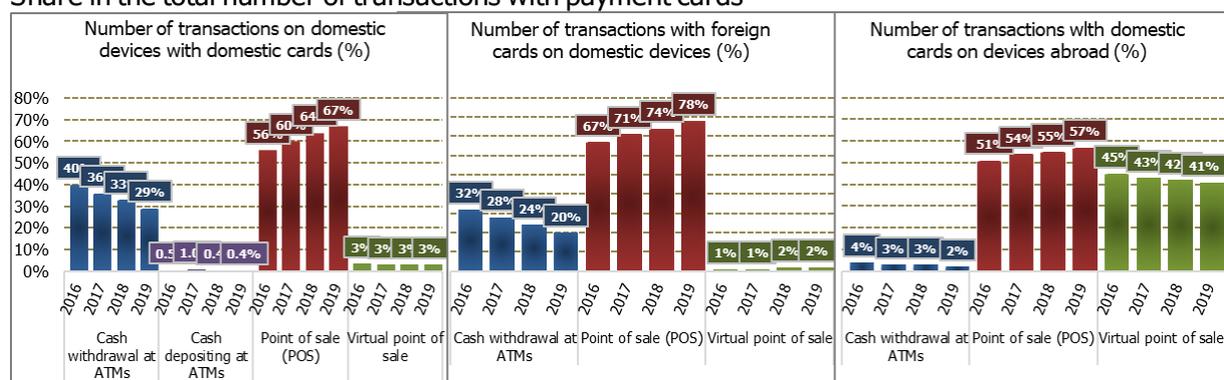
In 2019, 8 million transactions were performed with payment cards issued by domestic issuers at terminals located abroad, which is an increase of 25% compared to last year. Unlike the great use of ATMs in the country for withdrawing cash with payment cards from domestic issuers, but also from foreign issuers, holders of cards issued by domestic issuers when traveling outside of the country do not use often foreign ATMs and do not withdraw significant amounts of cash (share of 2% in the number of the total transactions with cards from domestic issuers at terminals outside of the country). The largest share (57%) in the total number of these transactions is that of payments at POS terminals, with a slight upward trend. There is a somewhat smaller, but considerable use of payment cards from domestic issuers for payment at virtual (Internet) points of sale of foreign entities (41%), although there is a slight downward trend of the share.

<sup>75</sup> Austria, Belgium, Germany, Greece, Denmark, Ireland, Italy, the United Kingdom, Portugal, Finland, France, the Netherlands, Sweden and Spain.

<sup>76</sup> Bulgaria, Estonia, Cyprus, Latvia, Lithuania, Poland, the Czech Republic, Romania, Slovakia, Slovenia, Hungary and Croatia.

<sup>77</sup> The latest available data for the EU member states are as of 2018.

Chart 90  
Share in the total number of transactions with payment cards



Source: NBRNM.

### 7.3. Payment infrastructure

The total number of transaction accounts in the country opened with the commercial banks at the end of 2019 amounts to 3.96 million, out of which 95% are of natural persons, while the rest of 5% are accounts of legal entities. Almost every fourth natural person depositor holds accounts for electronic payments, while, for legal entities, 31% of the total number of transaction accounts enable electronic payments.

In 2019, the issuers of payment cards in the country continued to apply the advanced technologies underlying the operations with payment cards worldwide. In this context, there was an accelerated replacement of contact cards with cards with contact-contactless technology, including a replacement of the payment cards the period of which was still not expired, whereby at the end of 2019, the contact-contactless technology was applied in 53.2% out of a total of 1.8 million payment cards in circulation in the country. In 2019, another bank offered the virtual wallet integrating the contactless card with the mobile application.<sup>78</sup> With such technological innovation, when all necessary elements for the safe and efficient execution of the payment are integrated with the mobile application, the domestic payment services market is enriched with a modern, comfortable and safe manner for execution of the payments, which excludes the physical use of the plastic payment card.

To apply the contactless technology, in parallel with the growth of the number of contact-contactless cards of 29.4% on an annual basis in 2019, there is also an annual growth of 8% of the number of terminals installed at the points of sale which, in addition to contact, also support contactless technology, thereby reaching a share of 63% in the total number of terminals for electronic payments at POS terminals at the end of 2019 (19,981 installed contact-contactless terminal out of a total of 31,644 terminals). Increased offer and use of modern digital devices for making payments in 2019 was registered also with

ATMs through the growth of 22.4% of the number of ATMs with an additional credit transfer function (355 ATMs), as well as with an annual increase of 19% of the number of ATMs with an additional cash deposit function (164 ATMs).

At the end of 2019, with an annual growth of 10.6%, the total number of merchants in the country who accept payments with payment cards reached 13,733, whereby the largest share of 93.6% is that of merchants who accept them at POS terminals (12,858), while, 6.4% or 875 are merchants who accept payments with a card at virtual points of sale. Compared to

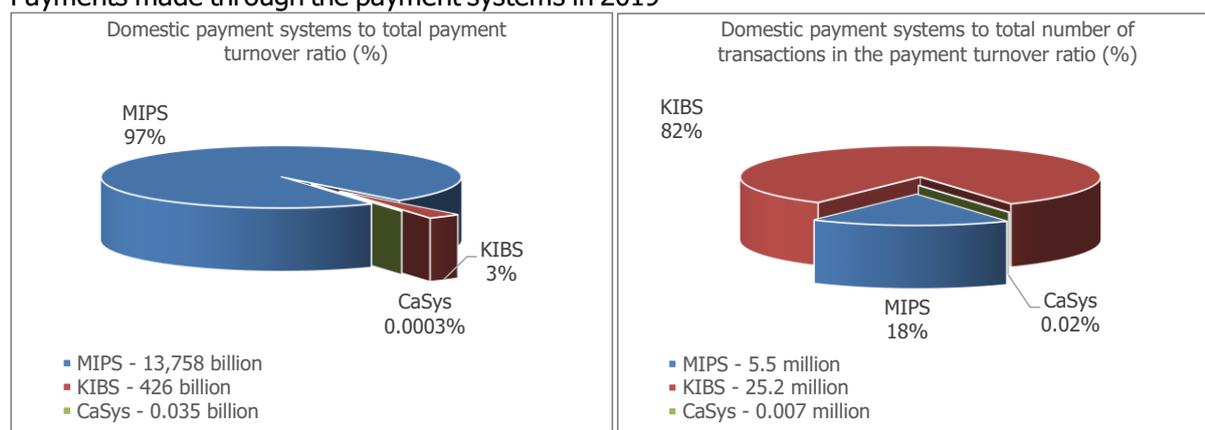
<sup>78</sup> In 2019, a total of two banks offered a virtual wallet based on the integration of the contactless card with the mobile application.

last year, the annual growth of the number of merchants who accept payments with a card at virtual points of sale is significantly higher (by 16.8%) compared to the growth of merchants who accept payments with a card at physical points of sale (10.2%).

#### 7.4. Payment systems in the country

In 2019, the total value of transactions in the country through payment systems reached Denar 14,185 billion, registering a high annual growth of 82%<sup>79</sup>, amid realized 30.7 million transactions, which registered a moderate annual growth of 3%. In terms of the value of transactions, the largest part are executed through the payment system MIPS, or 97%, while, the remaining part of 3% of the total payments are executed through the payment system KIBS<sup>80</sup>. An insignificant part is executed through the payment system CaSys<sup>81</sup>. In the structure of the number of transactions in the same period, the largest share was that of the payment system KIBS (82%), followed by the payment systems MIPS and CaSys with 18% and 0.02%, respectively.

Chart 91  
Payments made through the payment systems in 2019



Source: NBRNM

Net settlement of payments through KIBS and CASYS is made on a regular basis through MIPS, which in 2019 worked for 248 days, ensuring 100% accessibility of the participants to the system.

#### 7.5. Payment systems oversight in accordance with the internationally established standards

The NBRNM oversight activities include oversight of the payment system operators and analysis of the data and information provided by operators, in accordance with the national legal framework that regulates the oversight<sup>82</sup> which translates the internationally established oversight standards<sup>83</sup>. The NBRNM performs the payment systems oversight directly, by insight with the operator who is managing the payment system and indirectly

<sup>79</sup> The high annual growth of the value of turnover is a result of an increased placement of overnight deposits by banks with the NBRNM which are settled in MIPS.

<sup>80</sup> Clearing House - Clearing InterBank Systems AD Skopje operates the payment system for multilateral deferred net settlement for processing of small payments of below Denar 1,000,000.

<sup>81</sup> International Card System AD Skopje (CaSys) is a system of multilateral deferred net settlement of payments with domestic brands of payment cards.

<sup>82</sup> Decision on the manner and the 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).

<sup>83</sup> Principles for Financial Market Infrastructure (PFMI) of the Committee on Payment and Settlement Systems and the Technical Committee of the International Organization of Securities Commissions.

through regular off-site monitoring of the payment systems operations. These activities primarily aim to identify the potential risks in the operations whose appropriate management will enable efficient, smooth and reliable functioning of the payment systems.

In this regard, during 2019, the NBRNM performed direct partial oversight of the operator of the payment system KIBS for assessment of the compliance of the operations of this payment system with the requirements for the important payment systems from the principles: 8 (Settlement finality), 9 (Money settlements), 21 (Efficiency and effectiveness) and 23 (Disclosure of rules, key procedures, and market data). The assessment of the conducted oversight showed that KIBS observes the Principles 9 and 21, while it mainly observes the Principles 8 and 23. Taking into account the performed oversight, the NBRNM issued recommendations for improvement of the operations of the payment system, whose implementation is under way.

In addition, the NBRNM started with the direct partial oversight of the payment system MIPS for assessment of the compliance with some of the requirements for systemically important payment systems and started with the direct partial oversight of the operator of the payment system KIBS for assessment of the compliance with the requirements with the remaining seven principles, whereby the oversight over the payment system KIBS will be completed according to all requirements from the principles that are applicable for the important payment systems. The reports on the performed direct partial oversight over the payment systems MIPS and KIBS will be prepared during 2020.

At the same time, off-site monitoring of the payment systems was conducted on a regular basis, on the basis of which it was determined that during 2019 the payment systems in the Republic of North Macedonia operated without interruptions, with a high level of operativeness, availability and efficiency, without registered falls and disturbances. The payment transactions that were initiated by the participants in the payment systems for own account or for account of their clients were settled in the same day and no system flaws were recorded.

## **7.6. International conference in the domain of payments and market infrastructure**

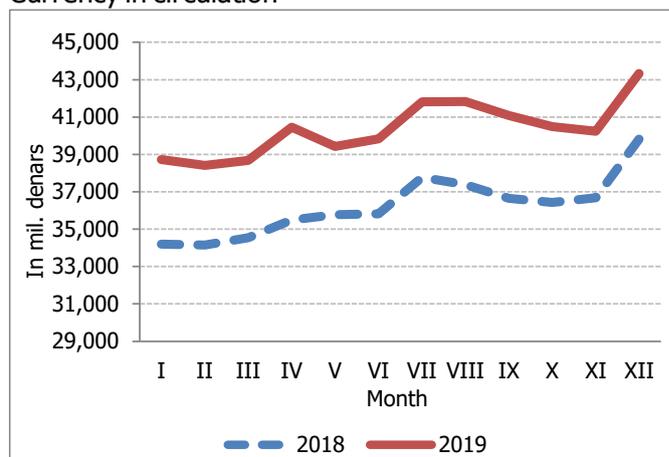
In cooperation with De Nederlandsche Bank, the 12th Conference on Payments and Market Infrastructures was held, titled: *Open doors to the changing payments landscape*. At the Conference, presentations were given by experts from several central banks and the European Commission. At the conference, expert views and experiences were shared on a number of key issues related to amendments to the EU payments legislation, the latest payment solutions managed by FinTech companies, open banking, the development of instant payments, digital currencies and crypto assets. The knowledge from the Conference and the exchange of experiences between the participants were assessed as especially important and useful for the process of transposition of the legislation of the EU in the new national legal framework for payment services and payment systems.

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

### 8.1. Currency in circulation

As of 31.12.2019, the total amount of the currency in circulation amounted to Denar 43,323 million, which is by Denar 3,498 million or 8.8%<sup>84</sup> more compared to the end of 2018. The structure of the currency in circulation suggests that at the end of the year, banknotes and coins make up 97.4% and 2.6%, respectively of the total value. In terms of the number of pieces of currency in circulation, the share of banknotes equals 27.7% (101.4 million pieces), and the share of coins equals 72.3% (265.0 million pieces).

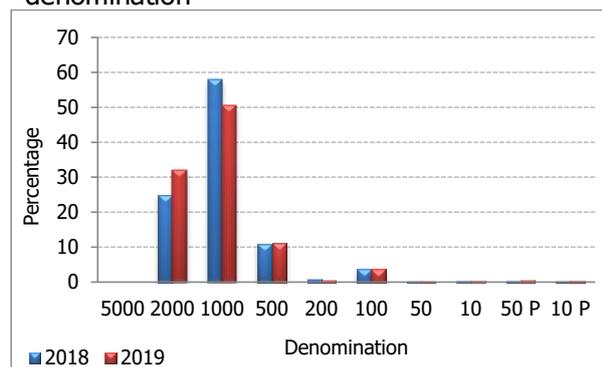
Chart 92  
Currency in circulation



Source: NBRNM.

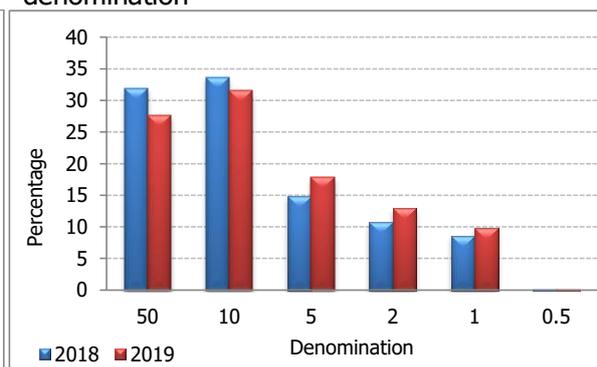
Banknotes in denomination of Denar 1000 (50.6%), Denar 2000 (32%) and Denar 500 (11.2%) account for the most of the total value of banknotes in circulation. Other banknotes account for 6.2% of the total value. In 2019, coins in denominations of Denar 10 (31.6%), Denar 50 (27.6%) and Denar 5 (17.9%) had the largest share in the value of coins.

Chart 93<sup>85</sup>  
Value share of banknotes in circulation, by denomination



Source: NBRNM.

Value share of coins in circulation, by denomination

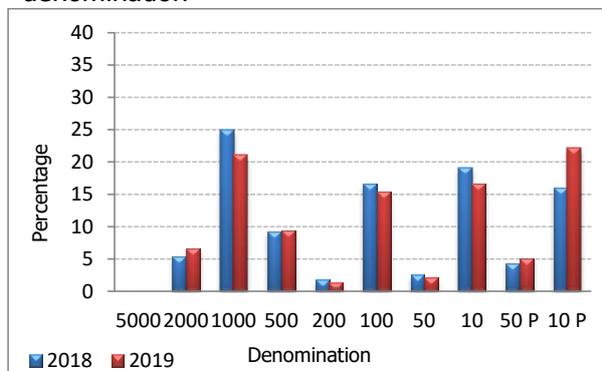


<sup>84</sup> The presented data on the currency in circulation do not include the quantities and value of the collector coins, which were made and put into circulation by the National Bank for artistic, cultural and promotional reasons. Collector coins are available primarily abroad, but also in the Republic of North Macedonia. The value of the collector coins in circulation, as of 31 December 2019, was Denar 11.1 million.

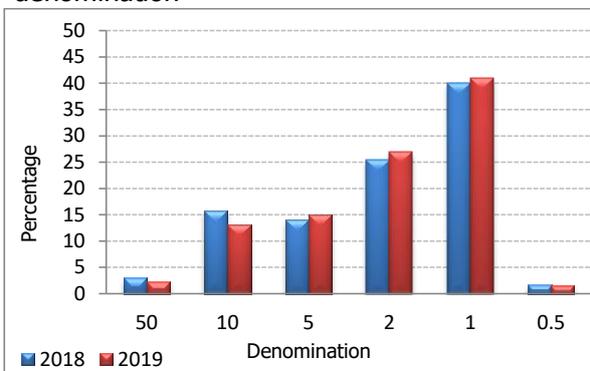
<sup>85</sup> The letter "p" in the charts denotes polymer banknotes. Banknotes in denomination of 10, 50 and 5000 denars and coins in denomination of 0.5 denars that are no longer legal tender are not completely withdrawn from circulation.

Chart 94

Quantity share of banknotes in circulation, by denomination



Quantity share of coins in circulation, by denomination



Source: NBRNM.

In the structure of the currency in circulation, according to the number of pieces, the share of banknotes in denomination of Denar 10 - polymer (22.2%), Denar 1000 (21.1%) and Denar 10 (16.7%) is the largest. Other banknotes constitute 40% of the total quantity of banknotes in circulation. The share of Denar 1 (41%) and Denar 2 (27%) coins is the largest in the total coins in circulation.

In the structure of the issued currency in circulation, polymer banknotes have an insignificant share (1.1%) relative to the other banknotes, whereby one should bear in mind their small nominal value and the relatively short period of circulation. According to the quantity, the share of polymer banknotes in the total number of banknotes in circulation is substantial and amounts to 27.2%, taking into account their important role in retail.

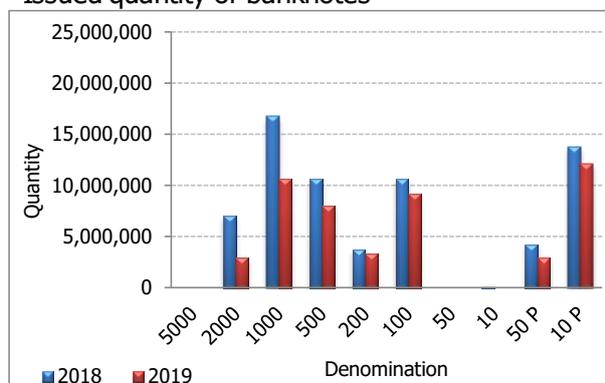
## 8.2. Supplying banks and cash centers with banknotes and coins

During 2019, the National Bank issued cash to banks and cash centers<sup>86</sup> in the amount of Denar 22,556 million (decrease of 41.2% compared to 2018). At the same time, cash has been received from banks and cash centers in the amount of Denar 19,061 million (decrease of 45.1% compared to 2018). The analysis of the denomination structure of banknotes and coins suggests that in the total turnover, the largest banknote is the denomination of Denar 1000 with a share of 25.7% in 2019 (i.e. 29.4% in 2018) and the most common coin is the denomination of Denar 2 with a share of 29.9% in 2019 (versus 20.6% in 2018).

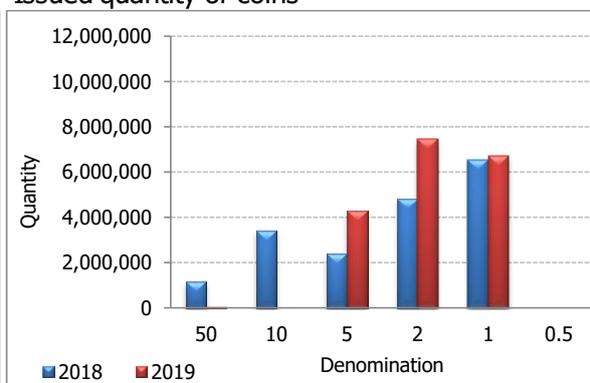
<sup>86</sup> During 2019, in the activities related to the cash supply process, the two cash centers where the cash operations were transferred from the commercial banks, continue to actively function.

Chart 95

Issued quantity of banknotes



Issued quantity of coins



Source: NBRNM.

### 8.3. Processing and destroying banknotes and coins

During 2019, the quality control process of banknotes in circulation covered all received banknotes. Of the total 37.8 million banknotes processed, 12.7 million banknotes were destroyed due to unfitness for circulation, same as in 2018. Most destroyed banknotes were denominated in Denar 1000 and Denar 100 (72%). In 2019, 8.4 million pieces of coins in denominations of 1, 2, 5, 10 and 50 denars were processed, 83 thousand pieces of which being withdrawn as unfit for circulation.

### 8.4. Expertise of suspicious / counterfeit money

In 2019, 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, the National Bank continued with the specialized training of staff in banks and cash centers. During 2019, a total of 364 employees were trained through presentations and direct handling of authentic and counterfeit money. At these training courses, expertise is conveyed to participants to be applied in their future activities. During 2019, the institutions are actively involved in the system for combat against the counterfeiting of money, the National Bank, the Ministry of Interior, the Customs Office, the Financial Police Office, the Basic Public Prosecutor's Office and the judicial authorities, adopted the national training plan, within which, the experts of the National Bank provide regular trainings for the employees in the other stated institutions. In October 2019, one training was conducted which was attended by a total of 15 representatives of these institutions.

As for the number of expert analyses committed during 2019, of the total 434 suspicious Denar banknotes received, the expert analysis carried out found that 73 banknotes were genuine, while the 361 were counterfeit banknotes. The number of identified counterfeit banknotes detected during 2019 increased by 57% compared to 2018. Of the total number of detected counterfeit banknotes in 2019, the most common is the denomination of Denar 500 (229 pieces), or 63.4% of the total number of counterfeits<sup>87</sup>, followed by the denomination of Denar 100 (82 pieces), or 22.7% of the total number of counterfeits and the denomination of Denar 1000 (37 pieces), or 10.3% of the total number of counterfeits. The total value of Denar

<sup>87</sup> The Denar 500 banknote 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 the past years, are still delivered.

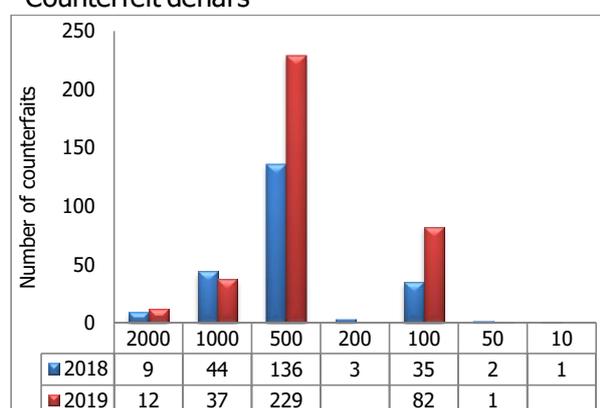
counterfeits in 2019 amounted to Denar 183,750.00, which is a negligible share compared with the total value of the currency in circulation.

Within its authorizations, and in order to determine the possibility for a replacement on the basis of the prescribed criteria, the National Bank in this time period also performed professional expertise on 430 samples of damaged banknotes submitted by banks and cash centers.

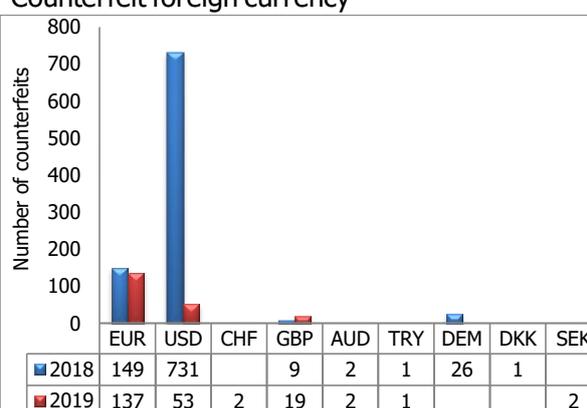
Also, during 2019, the National Bank replaced the damaged banknotes and coins submitted by natural persons, and replaced the currency withdrawn from circulation, and for which there is no time limitation for their replacement. The National Bank replaced a total of 12,369 pieces of banknotes and coins and 27,699 pieces of banknotes withdrawn from circulation.

Chart 96

Counterfeit denars



Counterfeit foreign currency



Source: NBRNM.

In terms of committed expert analyses of received suspicious banknotes and coins denominated in foreign currency in 2019, of total 591 analyses, 216 counterfeit and 375 original money were identified. Of the total number of counterfeit banknotes, the Euro banknotes (124 pieces) and US dollars (53 pieces) prevailed.

Just like the previous year, the number of registered counterfeit coins is insignificant and reduces to a total quantity of 13 pieces of counterfeit coins 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 properties<sup>88</sup>.

### 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 2019, a total of 7 on-site examinations were conducted, of which 6 were examinations of commercial banks and 1 examination of cash centers.

<sup>88</sup> 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.

Taking into account the tendency of worsening of the quality of currency in circulation, in addition to these announced controls, during 2019, the National Bank sought to conduct unannounced target controls of the money processing machines that are handled by skilled employees and especially toward the machines that are handled by the banks' clients (ATMs). Once the irregularities in the operations of the machines are identified, appropriate measures are taken, i.e. putting of the machines out of service until the elimination of the irregularity and the confirmation of their ability to carry out an appropriate check on and selection of money.

In the past period, a total of 82 testings of money processing machines are conducted. From them, 35 are performed within the regular tests due to expiration of the validity of the certificates issued by the National Bank, while 47 are performed after the conducted controls of banks and cash centers and the identified irregularities in the operations of the machines.

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.

#### **8.6. Sale of collector coins**

Collector coins are unique, representative and of great artistic value that promotes 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 country<sup>89</sup>.

During 2019, the National Bank enriched the collection of collector coins by issuing three new collector coins ("Happy Birthday", "Commercial Success and Fortune" and "Artificial Intelligence").

In 2019, a total of 156 pieces of collector coins were sold, of which 112 pieces through the National Bank and 44 pieces through the commission agent.

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<sup>89</sup> Due to the increased interest in these coins and in order to make them readily available for sale, 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 2019, pursuant to the Annual Supervision Plan, the National Bank carried out 12 regular examinations (on-site risk-based supervision) in 10 banks as well compliance examinations in 8 banks, 2 savings houses, 1 money transfer sub-agent and 210 examinations of licensed exchange offices.

### **9.1. On-site risk-based supervision**

Risk profile of the banks in the Republic of North Macedonia is primarily determined by the traditional banking activities and credit risk. Hence, the credit risk exposure as well as its management quality, with special emphasis on the properness of estimating impairment losses are most often subject to on-site supervision. Last year, the credit risk was examined in seven banks.

In 2019, in addition to the credit risk, the adequacy of the anti-money laundering and combating the financing of terrorism (AMLCFT) systems was assessed in 8 banks, the management of the operational risk was assessed in 2 banks, the corporate governance was assessed in 4 banks, the interest rate risk in the banking book was assessed in 2 banks and the management of the liquidity risk was assessed in 2 banks. Also, in the reporting period, the adequacy of information security was also assessed in 5 banks. The accuracy of capital adequacy reports was examined in one bank, while operating expenses documentation was examined in 2 banks.

The examinations showed that banks' risk management was adequate and that 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. In the part of the credit risk management, they refer to the improvement of the process of classification of the credit risk exposure, specifically a greater impact of the clients' creditworthiness and of the early warning indicators in this process. Also, the controls gave recommendations for the improvement of the existing processes through the strengthening of the criteria for approving exposure to non-financial legal entities and monitoring in the part of earmarked use of approved loans.

With the examinations of anti-money laundering and financing of terrorism systems, recommendations were also given to banks to increase their effectiveness in managing this risk. The recommendations refer to the profiling of the risk of the clients - non-profit organizations, associations or foundations and politically exposed persons, expansion of the analyses and controls when establishing a business relationship and when carrying out transactions with non-residents, strengthening of the analyses of the clients who establish a business relationship without physical presence, supplementing of a report on suspicion of MLFT and sending to the Financial Intelligence Unit, perceiving of the need for an interruption of a business relationship with certain clients or the need for reporting to the Unit.

In the area of banks' corporate governance, it is determined that mainly in all of them, banks' bodies comply with the laws and bylaws and are involved in risk management. Recommendations are given for further corporate governance regarding the revision of some internal acts- policies and procedures, extending the content of the reports from sessions of

the management bodies, strengthening the compliance activities through the preparation of annual plans for controls in individual organizational units, recommendations for the work of the Audit Committee and Risk Management Committee, improvement of the reward system, as well as improvement of the Internal Audit activities through appropriate modification of the audit cycle, scope of audits, staffing and internal work methodologies.

In assessing the banks' IT risk or information security risk, recommendations were given for establishing a framework on planning and development of IT strategy, retaining the existing IT staff and strengthening the staffing, improving the management of operational continuity and its testing, regular review of the risk analysis for information media and internal acts related to information security, strengthening security by improving system configuration, establishing mechanisms to protect against digital space attacks, further segregation of responsibilities for administrators and setting up a privilege based approach. There are also recommendations in the part of the development and upgrade of the systems regarding the timeliness of the new introductions and changes, upgrade of infrastructure that is placed on the outdated version of the system software, improvements of the system testing process after the performed upgrades.

In terms of operational risk management, recommendations were given for revising internal acts, supplementing the reports for the bank bodies, expanding the areas for which key risk indicators are provided, improving the process of data collecting on operational risk losses and their inclusion in the harmful events database and strengthening the testing of plans for business continuity by expanding the complexity of testing scenarios and increasing the processes and number of employees to be involved in the testing.

In terms of liquidity risk, the banks' controls have determined that their liquidity management is satisfactory with an appropriate framework that includes internal acts, properly defined indicators and limits for liquidity risk monitoring, appropriate stress testing and adequate management information system. Recommendations for reviewing internal acts were given, i.e. reviewing the methodology for stable deposit core identification as well as methodology for preparation of expected maturity structure of assets and sources.

Regarding the interest rate risk in the banking book, the controls issued recommendations for internal acts change- the part of the defined assumptions for determining probability and frequency of the interest rates risk, preparation of the report on the economic value of banking book, stress testing framework and the need to improve the established methods for risk measurement.

The controls that covered operational expenses show that they have been documented.

## **9.2. On-site compliance examinations**

The on-site compliance examinations are mainly 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 service providers and their sub-agents were aimed to assess the 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. Although mainly harmonized work has been established, non-compliances have been identified in some institutions which led to misdemeanor sanctions.

### 9.3. Licensing of banks and savings houses in 2019

Within the regular activities in the area of licensing of banks and savings houses in accordance with the Banking Law, during 2019, the National Bank processed 74 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 2019

<b>Type of license/approval (banks)</b>	<b>issued</b>	<b>rejected</b>	<b>halted</b>
Approval for acquiring shares in a bank	2	/	3
Approval for start of conduct of financial activity	1		/
Approval for statute amendment	19	/	1
Approval for appointment of a Supervisory Board member	21	/	4
Approval for appointment of a Management Board member	17	/	2
Approval for including a gain in Common Equity Tier 1 capital	4	/	/
<b>Type of license/approval (savings hoses)</b>	<b>issued</b>	<b>rejected</b>	<b>halted</b>
	/	/	/
<b>Total</b>	64	0	10

## X. Statistics

During 2019, the activities for further improvement of content, details, reliability and timeliness of the statistical data continued. Besides the collection, preparation and publishing of the statistical data in the area of external and monetary statistics, there were activities during the year concerning further development and upgrading in certain segments, both from the methodological aspect and development of new statistical data as well as from the aspect of the improvement of current information infrastructure, which should increase efficiency and effectiveness in the compilation of statistical surveys.

Concerning statistics, 2019 was marked by statistics and activities related to **improvement of the transparency and availability of the statistical data**, which despite the regular publishing of standard statistical data and press releases, was also achieved through:

- official accession of the Republic of North Macedonia to the latest IMF's SDSS<sup>90</sup> Plus on January 28, 2019 making the country one of the 18 countries in the world to have met the statistical reporting requirements under this standard. For proper information of data users, a joint promotional event with the Ministry of Finance and the State Statistical Office was organized;

- setting the new statistical portal NBStat on the website of the National Bank on December 18, 2019 in the Statistics section, which increased the usefulness of the published data and reduced the time required to browse through the data. By setting the NBStat, the activities started in November 2016 within the project *Building tools for Internal Data Analysis and Statistics Internet Web Portal for External Users*, funded by EU, were completed. The successful establishing of NBStat was preceded by series of activities such as: preparation of series of already published data in the required form; preparation and publication of manuals; redesign of the website of the National Bank in the section *Statistics* etc. A short video material is available on the website of the NBRNM for appropriate promotion of the tool;

- the purpose of introducing the journalists with the advantages offered by the NBStat, the years' regular Journalists' workshop was dedicated to statistics, with a special focus on the new statistical portal NBStat. The methodological foundations of both, foreign direct investment statistics and payment statistics as well as the way of their interpretation were discussed at the workshop.

In terms of methodological improvements and harmonization of certain statistical areas with international standards, progress was made in 2020 in the following areas:

In the area of **external statistics**, efforts were made to improve the coverage and quality of data, but also to increase data availability. The NBRNM made an intensive effort to adjust foreign trade data processing system to the new Customs Administration system. Also, there have been activities and analyses related to the adjustment of data sources in the context of further liberalization of capital transactions with non-residents (January 2019).

- In the area of **monetary statistics**, 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 compliance with the international statistical requirements. Several

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<sup>90</sup> Special Data Dissemination Standard Plus.

activities have been undertaken in order to design the data structure, attributes, dimensions and financial instruments to be used to report on the balance sheet and balance and income statement. For proper informing of the reporting entities, the National Bank has held regular meetings with banks for their inclusion in the new project and for getting information about the course of activities. Additional confirmation on the method and content of the future reporting is expected within the IPA project "*Strengthening the capacities of the Western Balkan central banks in ESCB integration*" within the activities agreed with experts from the Central Bank of Portugal in November 2019.

- In the area of **financial accounts statistics**, there has been constant work on improving the methodology and quality of annual data. As a result, in April and October 2019, data on the flows of the financial accounts for the government sector for the period 2014-2018, by sub-sectors, as input elements for notification EDP tables, with improved methodology and scope of certain financial instruments. The new improved methodology was also applied in the submission of annual experimental data<sup>91</sup> on financial accounts to Eurostat in December 2019 (for the period 2013-2018) and leads to further compliance with the ESA 2010. Further improvement of the financial accounts statistics is expected with the activities within component 4 of the twinning project "*Strengthening the Institutional Capacity of NBRNM in the process of accession in ESCB*" started in November 2019 for further compliance with ESCB/ECB standards, focusing on quarterly financial accounts and annual flows.

- In the area of **securities statistics**, the activities for software connection of all available databases for domestic and international trade in securities, which is in an advanced stage, continued. The promotion of this statistics creates prerequisites for enriching the data sources and improving the quality of financial accounts statistics.

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 division of economic agents by sectors, as well as in the joint technical assistance projects for further development of several statistical areas (international trade in services, government sector statistics etc.).

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<sup>91</sup> The data is treated experimentally, until the scope and details appropriate for their dissemination is reached.

## **XI. Internal audit**

In 2019, 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 2019 there were 20 audits in total (18 regular and 2 extraordinary audits), covering 20 business processes. 31 recommendations for improvement of the internal control system were given for the identified findings. 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 2019 the level of implementation of the given recommendations is 90%, i.e. 3 recommendations have not been implemented and they have a new deadline.

Besides the ongoing activities, the internal audit also implemented the Quality Assurance and Improvement Program in the Internal Audit Department. In this light, in 2019 the list of business processes that may be a subject of audit was revised, an assessment of the process of annual audit planning based on the risk analysis was performed, the periodic internal self-assessment of the operation of IAD was completed in terms of compliance of its work with the framework for professional practice of the internal audit, 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 2019.

## XII. Improving the National Bank institutional capacity

### 12.1. Strategy and prevention

*In order to develop and strengthen the functions that make up the second line of protection<sup>92</sup> in the National Bank, a Strategy and Prevention Office was established in 2019, as a separate independent organizational unit, unifying the functions of strategic planning, operational risk management, business continuity, information security, personal data protection and classified information, as well as compliance.*

Within the strategic planning process, in 2019, a comprehensive analysis of the expected external and internal impact factors influencing the operation was made, setting eleven strategic goals for the next three years. Moreover, there were no substantial changes in most of the strategic goals, except for the one related to maintenance and development of a reliable information system of the National Bank, through further continuous improvement in line with international practices. A number of program activities which enabled successful implementation of the basic goals of the National Bank were defined and implemented with the Work program, in accordance with the established strategic goals.

In terms of operational risk management, starting from the Operational Risk Management Policy, the National Bank developed the system of coordinated, comprehensive and systemic operational risk management in 2019. We actively worked on reviewing and assessing the size of risks, based on the probability and possible consequences amid risk event, as well as defining plans with operational risk management measures in order to prevent events that may affect the achievement of goals, financial results and reputation of the National Bank.

According to the Business Continuity Policy, in the National Bank there is a system in place for coordinated planning, updating and testing of measures necessary to ensure business continuity in a crisis. In 2019, the regular revision of the plans for business continuity was performed, as well as testing of the completeness and feasibility of the business continuity plans of 14 critical working processes by several organizational units. Thus, the National Bank confirmed the sustainability of the plans and the readiness to carry out the work tasks in crisis conditions.

Regarding the information system security, the National Bank worked on a comprehensive analysis on the risk from data leakage from the bank, in order to strengthen the protective mechanisms and reducing potential risks. Also, the **National Bank reassessed and confirmed its** compliance with all mandatory security controls provided for in the Customer Security Controls Framework "in the SWIFT KYC<sup>93</sup> application. To increase the awareness and responsibility of the employees when handling information, and taking into account the provisions of the Information System Security Policy of the National Bank, in 2019, the National Bank conducted trainings for the information system security and personal data protection, and provided the authorized officers for processing of classified information with

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<sup>92</sup> The first level of protection is consisted of organizational units which establish the basic functions and functions of support, manage risks arising from their operation level and have the deepest understanding of the working processes and changes in the environment in the areas for which they are responsible.

The second level of protection is implemented through identification, analysis and risk management, trainings, advice, rising awareness among the employees, control mechanisms and measures, as well as the way of implementation of the regulation in their work.

The third level of protection, the internal audit, conducts audit activities on the operation of first and second level of protection.

<sup>93</sup> KYC - Customer Security Controls Framework, v2019, 10 August 2018.

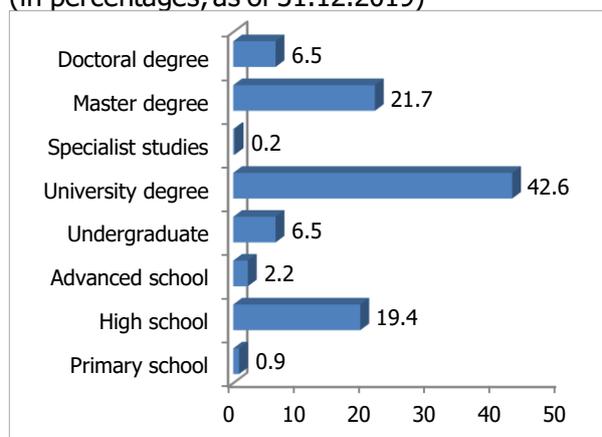
regular annual information on the rights and obligations when handling and storing classified information. Regarding the classified information security, the National Bank started the procedure for security certification of the communication and information system for work with classified information.

During 2019, the National Bank conducted controls of the compliance of internal regulations with the data protection regulations assessing the need for their amending due to the changes in the environment (changes in the legal regulations relevant to the information security system, data protection and security of classified information, changes in organization of the National Bank operation, changes in technologies etc.) Also, the National Bank conducted monthly and periodic controls, as well as internal and external control of the National Bank’s compliance with the personal data protection regulations.

During 2019, within the compliance function, the focus was on the assessment processes of compliance with the legal regulations. As part of its operations, the compliance function prepared opinions, recommendations, information to prevent possible non-compliance, also taking part in harmonization of laws and bylaws that affect the operation of the National Bank. From the aspect of ethical compliance, the National Bank actively worked on designing a new Code of Ethics for the members of the National Bank Council and employees, in accordance to the experiences of the ECB and other European central banks also in accordance to the national regulation governing the legal, ethical, and responsible work of the members of the National Bank Council and employees.

## 12.2. Human resources management

Chart 97  
Qualification structure of the employees in the National Bank according to the Macedonia Qualifications Framework (in percentages, as of 31.12.2019)



Source: NBRNM

In terms of age structure, the median age of employees in 2019 was 44.2 years (44.9 years in 2018). Employees with higher education (four-year university studies) dominate the qualification structure with 42.6%, followed by employees with masters degree (21.7%).

Professional training, performance evaluation and remuneration affect career development of the National Bank employees. This year as well, there were consultations held

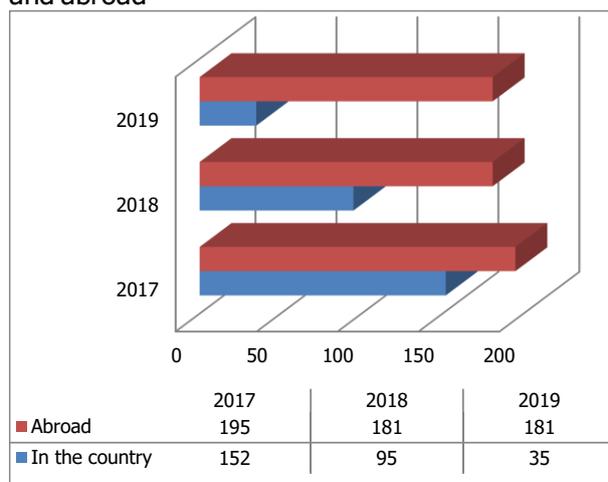
The National Bank of the Republic of North Macedonia is an institution that has been taking care and investing in its employees in order to strengthen their skills and competencies and increase their expert knowledge for creating highly educated staff to fight off any challenge while achieving its goals.

At the end of 2019, the number of employees<sup>94</sup> in the National Bank was 440. In 2019, the National Bank gender structure registered minor changes compared to previous years, i.e. 58.3% females, and 41.7% males.

<sup>94</sup> The total number of employees, including those hired through temporary employment agency, was 448. The charts in this section take into account the total number of employees.

across organizational units about implementation of the evaluation process, challenges that evaluators face, evaluators' recommendations regarding the evaluation process as well as the relationship between evaluation and employees' engagement. These processes require greater engagement, productivity and utilization of knowledge and creative potential in the institution, so the National Bank worked on development of the professional soft skills of the employees in the institution.

Chart 98  
Number of professional training courses in country and abroad



Source: NBRNM

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 2019, 216 professional training courses were attended in the country and abroad.

Compared to the previous year, the total number of professional training courses decreased by 21.7%, largely due to the lower number of training courses in the country which decreased by 63.2%, while professional training courses abroad remained the same. In 2019, the number of employees who attended professional training course decreased by 29.4% compared to the previous year,

due to the lower professional training courses in the country.

International institutions that organize professional training courses include EU central banks, the International Monetary Fund in cooperation with the Joint Vienna Institute and the World Bank who are the National Bank's major partners in the mutual cooperation programs as well as EU-funded projects.

The professional training courses in the country are primarily hosted by domestic education centers, primarily focusing on amendments to legislation in the area of the National Bank operations.

### 12.3. Research activity

In 2019, 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. During 2019, several research projects were delivered, related to: the impact of monetary policy on inflation, measuring the effects of the monetary policy, assessment of the equilibrium interest rate, short-term forecast of the export and import, monetary and macroprudential transmission, optimal level of euroization, the impact of global factors on inflation. In addition, during the year, the National Bank was involved in other long-term research projects, mainly in the field of macroeconomic modeling. The research program for 2020-2022, adopted in mid-2019, points to activities in the main research areas, with the activities in some projects being expanded.

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. During 2019, four regular quarterly sessions of the Club were held, at which several research papers were presented and reviewed that addressed research topics in the following areas: current GDP assessment using data with different time frequency, analysis of export companies using micro data, the interaction between the conditional (lowest acceptable) salary and duration of unemployment, examining the effects of the changes in the urban environment on the productivity of companies, determinants of (in)activity of women in the labor market, monetary versus macroprudential transmission, liquidity determinants and its relation to profitability. In April 2019, the National Bank bestowed an award for best paper written by a young researcher in the field of macroeconomics, and banks and banking systems.

During 2019, in the field of research activity, the National Bank continued activities related to building the Dynamic Stochastic General Equilibrium (DSGE), a project established through technical cooperation with the Czech Central Bank. At the same time, the National Bank began a research activity within the twinning project and had technical cooperation with the National Bank of Romania, in the field of economic and financial cycles, using the DSGE model. Employees of the National Bank participated in many conferences and international events with their papers and presentations.

#### **12.4. IT development**

During 2019, the IT Department continued pursuing its strategic objective of maintaining **stable information system** and its upgrade in accordance with the existing capabilities and international standards.

In this context, in 2019, 4,630 requests for IT services of various types were processed (such as access rights management, management of end-user tools (hardware and software), activities related to testing business continuity in the operation of the organizational units in the National Bank etc.). At the same time, all systems worked over the anticipated 98% of working hours, many of which with 100% availability. However, 2,422 IT incidents were opened and resolved, most of which due to account lock-in. Also, 663 activities for regular maintenance of systems were recorded, such as infrastructure upgrade and other equipment, patches (*baking*), vulnerability monitoring etc. Besides its regular operations, the National Bank implemented a number of software development projects. Taking into account the plan of software development projects, 27 projects were fully completed, the development of six projects is under way, while five projects were canceled, at the expense of which one unplanned project and several unplanned activities for developing and improving the applications in the National Bank, were successfully implemented.

Despite the ongoing activities, 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, introducing a new system for managing user accounts with high privileges on personal computers. In addition, software tools for maintaining document management system (DMS) were procured and installed.

Preparation was made on medium-term projects that will continue in the coming years while development environment was installed for a new version of the database servers (SQL servers), laboratory environment for a new version of the document management system servers, two pilot applications were processed in introducing a new way of electronic signature and a cycle of new penetration testing was started by a new external institution.

## XIII. Other activities

### 13.1. International cooperation

During 2019, the NBRNM continued to maintain and promote international cooperation, on both multilateral and bilateral basis.

Within the multilateral cooperation, representatives of the International Monetary Fund (IMF) paid a regular visit to the NBRM, in connection with consultations under Article IV of the IMF's Articles of Agreement. During 2019, the cooperation with the World Bank in the field of banking supervision continued, through a mission of technical assistance carried out by *FinSac* (FinSAC – World Bank Financial Sector Advisory Centre). A visit of experts from the World Bank was organized as well, within the Reserve Advisory and Management Program-RAMP.

In June 2019, **the National Bank successfully hosted the Annual IMF/WB Constituency Meeting in Skopje**, to which our country<sup>95</sup> belongs, attended by governors, finance ministers and other high representatives of the central banks and the ministries of finance of the member states of the Constituency and high representatives of the IMF and the World Bank Group. Current economic issues important to the member states of the Constituency were discussed at the meeting with a focus on: *How to make Capitalism work for all?*, in connection with the factors that cause increased income inequality, additional consequences on economic growth, but also in many other segments of society, as well as the instruments and measures available to policy makers. Special emphasis was placed on policies to promote greater competition, effective use of fiscal policy for redistributive purposes, improvement in the financial sector governance and human capital investment. At the same time, several bilateral meetings were held between the member states of the Constituency and representatives of international institutions.

This year, the National Bank management participated in the regular annual IMF/World Bank spring meetings, in part of the regular 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.

Within the bilateral cooperation, during 2019, the NBRNM had the most fruitful cooperation with the National Bank of Belgium and De Nederlandsche Bank, while continuing the long-term technical cooperation with Deutsche Bundesbank, as well as other central banks of the EU and the region.

In 2019, the NBRNM was engaged in activities related to the process of accession of the Republic of North Macedonia to the European Union by taking part in the implementation of the obligations arising from the Stabilization and Association Agreement (SAA), 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 North Macedonia to the Annual Report of the European Commission, and in the development of the Economic Reforms Programme (ERP). Representatives of the National Bank also participated in the explanatory meetings within the preparation for accession negotiations with EU. In November 2019, the National Bank concluded a **Cooperation Agreement with the European Commission** in the process of protecting euro coins against counterfeiting.

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<sup>95</sup> In addition to Holland and Belgium, the Dutch-Belgian Constituency also includes Armenia, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Georgia, Israel, Luxembourg, Moldova, Romania, Ukraine, Croatia and Montenegro.

Within the EU pre-accession funds (IPA) during 2019, the *Twinning Light* project: *Strengthening the capacities of the system for fight against counterfeiting of the euro* was realized, where the NBRNM participated together with the Ministry of Interior. The project was implemented by the Deutsche Bundesbank, with the support of the Croatian National Bank and Austrian Central Bank, aimed to provide support in establishing stable and efficient system for protection of both, EU financial interest and national financial interest, as well as effective monitoring of counterfeiting of euro banknotes and coins. In March 2019, the implementation of the *Regional programme to further strengthen the institutional capacities of the central banks of the Western Balkans for their integration to ESCB*, conducted by the Deutsche Bundesbank, with participation of twenty one central bank from ESCB, as well as ESCB itself. In the last quarter of 2019, the twinning project *Strengthening of the institutional capacity of the National Bank of Republic of North Macedonia on the way to its membership in the ESCB*, which aims to ensure further harmonization of the NBRNM functions with the EU legislation, ESCB standards and international best practices. The project covers four areas, namely: payment services and payment systems, banking supervision and supervisory practices, financial account statistics, monetary policy and research. The project is implemented by a consortium composed of the Deutsche Bundesbank and Croatian National Bank with the participation of experts from several central banks from ESCB.

Financial support was provided within the IPA Multi-beneficiary Statistical Co-operation Programme for participation of representatives from the NBRNM in the regular meetings of working groups and committees of Eurostat in the field of monetary, financial and balance of payments statistics. During 2019, within the TIAEX instrument, an expert mission was conducted in the field of application of derivative instruments and mortgage bonds in foreign reserves management.

The National Bank organized and hosted a Fintech Workshop dedicated to financial technologies in December 2019, in cooperation with the European fund for Southeast Europe.

### **13.2. Public relations**

During the year, the National Bank intensively communicated with the public by publishing a larger number of information on its website and on its sites on the social networks, including press releases and other materials intended for informing the public prepared in accordance with the trends in the central-banking community, as well as by organizing meetings with the journalists. In addition, over two hundred announcements were published, and five press conferences were held, as well as six informative meeting with journalists (press briefings). Besides the significantly increased scope of activities in the field of communication, the National Bank intensively worked on the improvement of its quality, whereby special attention was paid to improving the comprehensibility of press releases and the scope of information they contain.

The reports of the National Bank, statements on the implementation of the monetary policy instruments, as well as numerous publications and working papers were regularly published on the official website of the institution. The contents of the website are available in Macedonian language and translated into Albanian and English. The annual report of the National Bank was also published in hard copy.

Special attention was paid to the public relations development. 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. The e-

mails serving for direct communication with the public 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. The questions addressed to the National Bank by the media representatives were answered in a timely and detailed manner.

In December 2019, the traditional Workshop for the journalists was also held, where the National Bank presented the statistical web portal NBStat and the new data in the field of payment statistics. Within the Workshop, the National Bank also conducted a survey on assessing the quality of its communication with the public, according to the results of which, progress was achieved in this area compared to the previous years.

### **13.3. Financial education**

The National Bank has been undertaking numerous financial education activities aimed at rising financial literacy in the country. In 2019, 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 1450 students were included, accompanied by teachers and professors.

In the period from February to May 2019, the Macedonian Banking Association and the National Bank, together with the Security and Exchange Commission and the Ministry of Education and Science also supported the European Money Quiz. The quiz which was held for the first time in our country, has already taken place in several European countries for 13 to 15 year-olds. In February 2019, the National Bank organized a training for the teaching staff-team mentors involved in the preparation of the students who applied for the competition. The national competition in our country was held on 27 March 2019 in Skopje, within the European Money Week. At the European final in May in Brussels, the national winners took second place.

On March, 20 2019, a new Memorandum of cooperation in the area of Financial Education and Financial Inclusion between the National Bank, Ministry of Finance, Agency for Supervision of Fully Funded Pension Insurance, Insurance Supervision Agency and Security and Exchange Commission. With the memorandum, the five regulatory institutions for the first time include activities in the field of financial inclusion within the scope of their joint activities.

In March 2019, the National Bank started publishing series of educational texts *Economy for Everyone*, intended for all segments of the population, including adults. These series aim at bringing the operations of the National Bank closer to the population, by simply explaining several economic issues which are reflected in the everyday life, and are directly or indirectly related to the central banking operations. In 2019, the following topics were addressed: the role of the central bank, the importance of collateral in bank loans, pre-contractual information in consumer loans, use of credit cards and hedge against currency risk.

From 29 to 31 May 2019, the National Bank, together with other financial regulatory institutions, marked the Financial Literacy Day. For the first time, the National Bank announced a public call to all interested citizens to attend educational presentations in the National Bank on three separate topics in the field of its operations (monetary policy, banking system, payment systems), which met with great interest among the citizens. At the same time, an information desk was set up in the premises of the National Bank, where the interested citizens could get answers to their questions in the field of central bank operations.

Within the five-year project for technical assistance from the Ministry of Finance of the Netherlands and the OECD International Network on Financial Education (INFE-OECD), in order to build financial education capacities and developing a national strategy for financial education of the population, the National Bank, as a coordinator, realized its first mission of INFE-OECD in April 2019. Meetings were held within the mission with financial regulators, NGO's, as well as representatives of association of private financial institutions. In the last quarter, the National Bank started the preparation of the draft version of the first National Strategy for Financial Education and Financial Inclusion.

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: "What does home and family insurance mean to me?" and "I can save, too". The highschool students could send literary work- essay, on the topic: "I am saving-I think about my future". The interest of the primary school students to participate in the competition was also high this year, 908 student papers were received and a total of 41 essays arrived from the high school students.

On September 27, 2019 the National Bank hosted the Fifth Meeting of the Regional Working Group for Financial Education of Southeastern Europe. The meeting was attended by representatives of central banks and other regulatory institutions from the region where they discussed the current progress in the field of financial literacy and financial inclusion in the region, as well as further intensification of the activities in this field for achieving better results at the regional level.

In 2019, the National Bank published the brochure "Meet the National Bank of the Republic of North Macedonia", on the website and in hard copy. It is an informative and educational brochure which contain series of information on the operation of the National Bank and its basic objectives. During 2019, the National Bank developed a glossary of terms in the field of central bank and banking operations

In December 2019, the National Bank broadcasted the first educational animated short video on: "Security aspects of the credit cards", which is part of the series educational animated video materials "In the World of Finances with the National Bank". The other 8 educational videos from this project, supported by the European Fund for Southeast Europe (EFSE), will be prepared and broadcasted during 2020.

#### **13.4. National Bank Museum and National Bank Library and Archive**

During 2019, the National Bank Museum carried out its ongoing activities in the area of regular museum documentation, and regular and extraordinary procedures for conservation revitalization of the coins from the National Bank' Numismatic Collection. In addition, the Museum conducted surveys in the area of numismatics and monetary history as well as in the field of conservation of metal artefacts. Several types of activities were undertaken in terms of the regular museum education of the visitors of the permanent museum exhibit in the National Bank.

Of great importance, also from the aspect of promoting and developing of communication with public in the area of museum education of the National Bank, was the implementation of the conceptual phase of the Project for designing and visualization of the current museum exhibit of the National Bank in the future building of the National Bank, and

its completion is elaborated and digitalized basis for the actual realization of the new museum premises, both in terms of its interior and in terms of the content of the new exhibition.

Last year, the library and archive enriched the librarian and archive fund. The professional literature that was procured was for the needs of the employees and documents from the archival research in cooperation with a related institution in the area of the National Bank's operation were digitized. The care for constant access to electronic databases and professional magazines and newspapers contributed to information and efficiency in the execution of tasks.

Despite the ongoing activities, the applications used in the daily operations of the library and archive were revised. The application for the historical archive as well as the library cataloging application were changed in the areas related to regulation, and in the future, the National Bank will work on improving the user searches and the availability of the library material to the users.