

National Bank of the Republic of North Macedonia



Annual Report 2020

Skopje, April 2021

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Governor's foreword

Dear readers,

There is no doubt that the last year was a year of a dramatic upturn in all areas of living - probably the hardest year for the global economy after the Global Depression from the 1930s. With the occurrence of the pandemic and the introduction of the measures for protection of people's health and for prevention of its spreading, all of us, including policymakers, have faced a huge challenge. Hence, it is inevitable after a certain time distance to look back and to see how we coped.

After more than one year from the commencement of the global crisis, the data suggest that within our competences, we have appropriately responded to the current challenge. On the one hand, successfully attaining our legal goals and tasks that are a major contribution to achieve the overall macroeconomic stability. On the other hand, taking appropriate measures and decisions with which we gave our best to support the Macedonian economy in dealing with the shock of the pandemic.

However, the corona-crisis once again confirmed that not only the good assessment of the effects of the measures and decisions of policy makers is always important, but also their timeliness. Similarly as other central banks, we responded to this crisis quickly, by relaxing the monetary policy and by introducing regulatory flexibility, through which among other things, we temporarily delayed the repayment of the loans by the citizens and the companies hit by the pandemic. Such reaction contributed to maintaining favorable financial conditions, retaining the credit cycle of the banking system, easing the financial burden of the affected sectors, which was exceptional for overcoming the first wave of the crisis.

Policies were relaxed from the previously built space, visible through the moderate inflation and the safe level of foreign reserves. However, the crisis brought with itself great uncertainty, which imposed a need for taking measures which, for a small and open economy, with a fixed exchange rate, will provide a guarantee for rapid and easy access to foreign currency liquidity, amid sharp tightening of the global financial conditions. That is why, as a central bank, we launched a regional initiative which was supported by all central banks in the Western Balkans region to borrow liquidity in euros from the European Central Bank (ECB). The ECB responded positively to our request, which is a signal for recognition of the capacity of the National Bank to conduct appropriate policies and for the good fundamentals of the economy. In the current period, these funds are not used, but they continue to enable additional room for adequate action if the crisis imposes a need for that, while the repo line has a validity until March next year.

Overall, from a time distance of more than one year, the performances suggest that, as a central bank, we have appropriately responded to the acute wave of the pandemic and contributed to the reduction of the economic damages thereof, which is also noted in the assessments from the reports of all relevant international financial institutions. Of course, for both these assessments and for the overall economic environment, it is key that we have achieved our main legal objectives. Price stability was maintained, with moderate and low inflation rate, which last year was 1.2%, on average. Despite the short-lived pressures on the foreign exchange market, primarily due to the smaller supply of foreign currency, the exchange rate of the denar against the euro

remained stable, and the foreign reserves continue to grow and remained in the safe zone. At the same time, despite the crisis, but also other challenges we faced last year as a central bank, the banking system maintained and improved the indicators of its operations. According to the data on the banking system as of the end of the last year, the capital adequacy ratio increased, liquidity is traditionally maintained at a solid level, and the quality of the credit portfolio improved. These are only some of the data - the key indicators underlying the assessment of the stability of the banking system, which confirmed its resilience to shocks.

Referring to the year behind us, I must say that as in previous crisis episodes, we have faced speculation and incorrect information, which, in a period when the sensitivity of the real sector is pronounced, could have far-reaching consequences for the economy - in terms of the domestic currency and in terms of the banking system. However, the transparent relation with the public, with timely responses and taking appropriate measures, achieved objective informing of the public and stabilization of the market expectations.

Besides all these activities for dealing with the economic consequences of the pandemic, with commitment of the team of the institution, in 2020 we continued to work on our development projects. Taking into consideration the challenges for digitalization, which became more pronounced with the current crisis, we are especially glad that during the year there was an interest in the Innovation Gateway - a platform for communication with the fintech sector, that we established in late 2019. The main aim of this project is to support and encourage the development of innovations in the field of financial services and products. Therefore, I am glad that we can use it to communicate with all companies that develop or apply innovations in the financial area and use new technologies for all issues and dilemmas that are related to the regulation that concerns the fintech sector, as well as for all proposals in this area.

With the support from the European Fund for Southeast Europe (EFSEE), last year we also conducted the Survey on the development of the fintech sector in the country. The results of the Survey will serve as a basis for more detailed discussions with financial institutions, regulators and other stakeholders in order to take further activities for support of the development of innovative financial services. One of the key activities for this purpose will be the development of the National Strategy for Supporting the Development of the Fintech Sector, which is planned for this year. **At the same time, in order to monitor the novelties in the field of digitalization, representatives of the National Bank took part in the work of the Innovation Hub of the Bank for International Settlements (BIS),** where key issues for the future of the financial world are being discussed, such as the issuance of central bank digital currencies, the green financing tokenization, the monitoring of the development of the global stablecoins.

Also, we have invested in other important projects to further improve our institutional capacities. We were included among the bodies for carrying out statistical surveys which not only that were not interrupted in the current period of the crisis, but also methodological improvements were made and new and more detailed data were introduced. Namely, at the end of the year for the first time we published data on financial accounts statistics, as one of the most complex statistics. In this way, we continue to meet all the requirements and obligations that we assumed two years ago when we became the 18th country in the world that meets the highest statistical standard of the IMF - SDDS Plus. At the end of the year we also organized a workshop for the countries of Southeast Europe dedicated to the challenges for statistics imposed by the COVID-19 pandemic. The achievements in this segment are extremely important, because the need for more granular data increases every

day and in the subsequent period, they can be provided only by bodies for carrying out statistical surveys who are prepared to follow the new standards and practices.

At the same time, last year, we worked on the first Strategy for Financial Education and Financial Inclusion, and we placed an emphasis on promotion of the competition and the protection of consumers, by concluding a Memorandum of Cooperation with the Competition Protection Commission, aimed at improving the exchange of data and information related to the competition in the banking sector. At the same time, the National Bank intensified its activities for cooperation with the civil sector in the field of financial education, financial inclusion and protection of consumers of financial services and products. The development of such cooperation for the purpose of higher financial literacy and greater financial inclusion of the population, as well as of its greater awareness from consumer aspect, is extremely important. Namely, in this way, even more visible results are achieved with greater availability of the knowledge to most of the population, which is also important for the further strengthening of the financial stability and for the development of the economy as a whole.

It is especially important that, during 2020, our efforts for faster approximation to the European family of central banks also continued. So, we concluded the Cooperation Agreement with the ECB in the field of protection of banknotes in euros against counterfeiting. With this, we made yet another step in the fulfillment of the recommendations from the report of the European Commission and confirmed our strategic commitment for accession to the European System of Central Banks. In the context of this strategic commitment, it was especially important that during the last year the Twinning Project "Strengthening of the institutional capacity of the National Bank of the Republic of North Macedonia in the process of its accession to the European System of Central Banks" also continued, funded by the EU, which successfully ended this year with a series of achieved results, in the field of payment systems, supervision, statistics and research activity.

These are only some of the implemented projects. Some of the projects, including those for the further strengthening of the financial stability, as well as the new Law on Payment Services and Payment Systems on which we worked together with the Ministry of Finance, will yet give results that would be an investment in the Macedonian economy.

Dear readers,

Last year, the crisis reminded us of the importance of previously learned lessons that we should always carry with us. It is important in good times to conduct sound policies through which we will strengthen the room for response, when it is necessary to provide support to the economy. No challenge can be appropriately fought off without built, professional and devoted teams. Crises are often catalysts for certain processes. This crisis accelerated the process of digitalization of the economies and of the entire society, to which we should also adjust appropriately.

We are glad that the achieved results confirm that the National Bank, with its policies before the crisis, enabled room for an appropriate response also in such hard times, thus confirming the professionalism, the commitment and the readiness of its team. And such team is also prepared to contribute to the processes that will have to take place for the purpose of a faster materialization of the perspectives for our economy.

But we must not stop only at what has been achieved so far. On the contrary. We are prepared and determined to work even more by following the latest and highest standards

and the best practices in central-banking operations also in this period of global uncertainty. With great vigilance, we monitor the unfolding of the events and the potential risks coming from the environment and their effects on the domestic economy and we will always be devoted, within our competences, to give our best for the Macedonian economy in dealing with the current crisis.

28 April 2021
Skopje

Governor
and Chairman of the Council of
the National Bank
Anita Angelovska Bezhoska

Short review of the macroeconomic developments in 2020

In global terms, 2020 will be remembered for one of the greatest world recessions, caused by extraordinary non-economic factors - the coronavirus pandemic. The health crisis, as a specific experience in the newer economic history, imposed a need for strengthened protection of public health and introduction of measures for prevention of the further spread of the virus, which had a strong impact on the global economy and on the individual national economies, according to the degree with which they were hit by the virus and the protection measures they implemented. The largest drop was registered in the second quarter which was accompanied by the toughest protection measures, with a strong impact on the economies. The gradual relaxation of the measures throughout the year, together with the stimulating measures of the macroeconomic policies, had an appropriate positive impact on the economic performances. However, for the entire 2020, the **global economy fell by 3.5%, which is assessed as the greatest global recession since the Great Depression in the 1930s.** Macroeconomic policy makers around the world in 2020 faced an extraordinary situation that imposed a need for an urgent response in order to support the economies for dealing with the consequences of the corona-crisis. The occurrence of a new wave of the virus at the end of the year and the mutations of the virus represent downward risks to the prospects for the economic recovery in 2021, while the vaccines and the vaccination process in several countries act encouraging in this respect.

The Macedonian economy did not deviate from the global trends, taking into account the occurrence of the infection in the first months of the year and the undertaken preventive measures. Contrary to the GDP reduction in the second quarter (14.9%), in the second half of the year, the fall was smaller, whereby throughout the year it was dispersed among different economic activities, suggesting the strength and prevalence of the shock. The impaired functioning of the global value chains was additionally reflected on the economic and export performances. However, as a result of the rapid adjustment of the companies to the new imposed working conditions, the changes in the habits of the population, the gradual relaxation of the protective measures, as well as the stimulating measures of the policies, **in 2020 there was a decline in GDP of 4.5%,** which was in line with the expectations of the National Bank. In terms of the structural components, the fall was conditioned by the reduced consumption, with a positive contribution only of public consumption, contrary to the positive contribution of net exports.

In the external sector, the current account deficit remained at a moderate level of 3.5% of GDP, similar to last year's performance, amid a lower trade deficit in goods. Namely, the pandemic and the restrictive measures for prevention of the infection adversely affected both sides of foreign trade, whereby the decline in the imports was larger relative to the fall in exports. At the same time, there was a lower deficit in primary income and a higher surplus in services. These effects were entirely offset by the smaller net inflows on the basis of secondary income, amid **significant reduction in the net inflows of foreign cash purchased on the currency exchange market.** Unlike other crisis situations, this market segment this time registered no major pressures from the demand for foreign currency, given the reduction in the supply of foreign currency, which mainly reflects the fact that most of the inflows come in cash from the emigrants abroad. Namely, the conditions imposed by the pandemic with the closure of the borders, the limited movement, the reduction of the economic activity and employment in most of the countries had a negative impact on disposable income and on the possibility to send a more significant portion of the income of emigrants back to the parent economy. The increase in the remittances through

official channels should also be noted, although they still constitute a smaller part of the total private transfers.

The National Bank met the pandemic crisis with an appropriate level of foreign reserves, which has been registering a constant increase in the previous few years, amid a relatively high purchase on the foreign exchange market. Also, during 2020, there were inflows from the government borrowings abroad in order to offset the consequences of the crisis. Foreign reserves registered an annual increase, despite the net sale of foreign currency on the foreign exchange market, which significantly slowed down during the second half of the year, in line with the more favorable movements in the economy, particularly in the export segment. It is worth mentioning that also in 2020 there were net inflows from foreign direct investments, but in more modest scope.

The appropriate level of foreign reserves, together with the low average inflation, which in 2020 stood at 1.2% annually, enabled a fast and timely reaction of the monetary policy, in response to the consequences of the pandemic, in order to maintain and stimulate the credit flows and consequently, support the economy. Even in the first months of the pandemic, the National Bank gradually lowered the interest rate, and also took measures for increasing the liquidity of the banking system by gradually reducing the supply of CB bills and expanding the list of eligible securities as instruments for providing denar liquidity to banks. The reactivation of the measure for reduction of the reserve requirement base, this time for loans to the most affected sectors by the pandemic, as well as the regulatory changes that provided greater flexibility to banks for the lending process, supported banks' lending. Consequently, it is noteworthy that in an extremely complex year, banks' deposits and loans of the private sector continue to grow. Total deposits increased by 5.7%, with the greatest contribution of transaction deposits, partially reflecting the effect of the consumption limitations imposed by the pandemic, while total loans increased by 4.7% annually.

Overall, 2020 was a year marked by the pandemic, whereby in a difficult environment, the National Bank with its timely response, taking appropriate measures and strengthened communication with the public contributed to the successful achievement of its goals and stabilization of market expectations. The rapid and timely response of the monetary policy and the coordination with the fiscal policy in response to the global crisis cushioned the blow on the real sector. Moreover, once again it was confirmed that the room that is built in good times by conducting sound and sustainable policies, leaves an opportunity for adequate action when necessary. Despite the expected revival in 2021, however full recovery and compensation of the economic losses is expected during 2022, suggesting a need for close monitoring of the macroeconomic developments and appropriate policy adjustment in the following period.

Basic economic indicators for the Macedonian economy

<i>annual changes, in %</i>	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Real sector													
Gross domestic product *	5.5	-0.4	3.4	2.3	-0.5	2.9	3.6	3.9	2.8	1.1	2.9	3.2	-4.5
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	1.2
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	16.4
External sector													
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	-3.3	-3.5
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	-17.6	-16.8
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	3.2	1.9
Gross external debt (% of GDP)	48.8	55.9	57.8	64.2	68.2	64.0	70.0	69.3	74.7	73.4	73.0	72.7	80.2
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	3,359.9
Monetary sector													
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	6.9
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**	4.7
Total deposits (including transaction deposits)	8.9	17.8	12.8	9.1	4.4	5.4	10.5	6.4	6.1	5.0	12.1	9.0	5.7
Fiscal sector													
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	-8.1
Public debt (% of GDP)	23.0	26.2	27.2	32.0	38.3	40.3	45.8	46.6	48.8	47.7	48.4	49.4	60.2
Banking sector													
Capital adequacy ratio (%)	16.2	16.4	16.1	16.8	17.1	16.8	15.7	15.5	15.2	15.7	16.5	16.3	16.7
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	3.4
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	23.3

Source: NBRNM, SSO, Ministry of Finance.

* Preliminary data for 2019, estimate for 2020.

** Corrected for the write-offs.

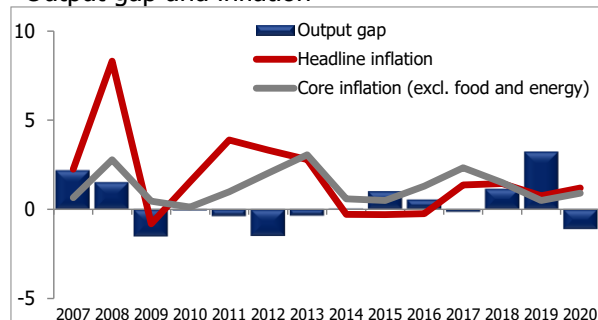
I. Monetary Policy in 2020

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.

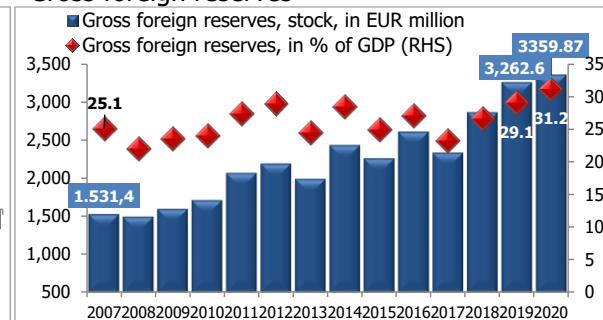
Considering these legal provisions and the specific circumstances due to the health and economic crisis caused by the COVID-19 pandemic, during 2020, the National Bank tailored its monetary policy to ensure continuity in achieving its legally defined objectives. Monetary policy objectives were successfully achieved, as perceived through the maintenance of price stability and exchange rate stability. Foreign reserves registered an annual growth and remained at the appropriate level and in the safe zone. Regarding the price stability, in 2020 there was a moderate annual growth of domestic prices, in conditions of a further downward movement of energy prices and moderate growth of the food and core component of inflation. In 2020, the financial stability was successfully preserved in support of the achievement of the primary goal. Amid a safe level of foreign reserves and absence of inflationary pressures, during 2020, the National Bank continued to relax the monetary policy, in order to mitigate the effects of the strong negative shock to the domestic economy related to the rapid spread of the viral infection COVID-19.

Chart 1
Output gap and inflation*



Source: SSO and NBRNM.

Chart 2
Gross foreign reserves



Source: NBRNM.

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

Chart 3
Foreign reserves adequacy ratios

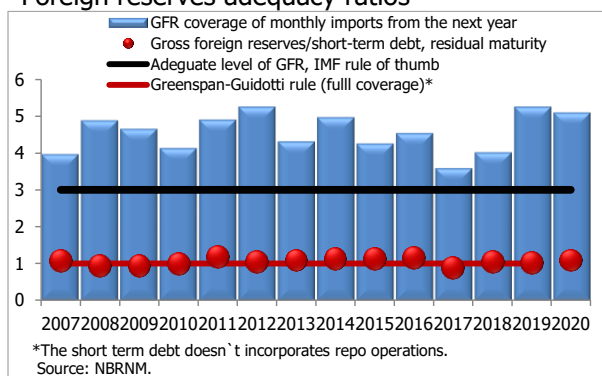
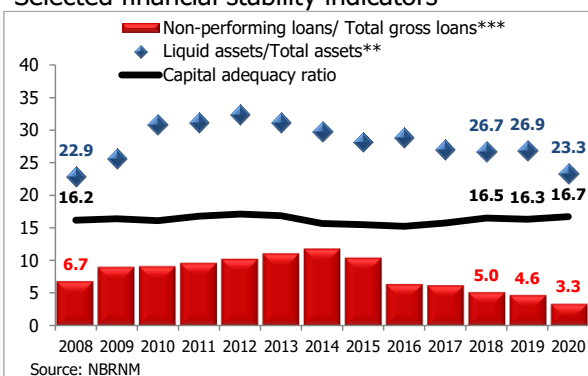


Chart 4
Selected financial stability indicators



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

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

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

Source: NBRNM and SSO.

1.2. Monetary policy setup

The National Bank relaxes the monetary policy also during 2020, in order to mitigate the negative consequences of the COVID-19 pandemic. During 2020, the National Bank cut its policy rate on three occasions, reducing it to the historically lowest level of 1.5%¹, amid simultaneous reduction of the offered amount of CB bills by Denar 15,000 million. Also, the National Bank reintroduced the non-standard reserve requirement measure which allowed reducing the base for banks' denar reserve requirement for the amount of newly approved and restructured loans to companies which are most affected by the spread of COVID-19. At the same time, in August 2020, the National Bank reactivated the auctions of foreign currency deposits, which, in conditions of uncertainty on the international markets, gives an opportunity to the banks in the country to place part of their foreign assets in short-term and safe instruments of the central bank. Such monetary policy setup supported the credit flows in the economy and increased the liquidity in the banking system, amid a solid level of foreign reserves and absence of inflationary pressures. Total deposits and loans continue to grow on an annual basis, despite the growing uncertainty arising from the pandemic. The National Bank carefully monitors the indicators and potential risks of the domestic and external environment, in order to adequately adjust the monetary policy setup.

The environment for conducting the monetary policy in 2020 imposed accommodative nature on the policies, in order to mitigate the negative effects of the COVID-19 pandemic and of the measures for prevention of the spread of the virus on the economy. The National Bank intervenes in the foreign exchange market in order to supplement the supply of foreign currency in conditions of reduced foreign exchange inflows in the economy due to the pandemic, amid simultaneously reduced demand. Household savings, despite the health crisis, continue to grow, which was also due to the greater restraint from spending in conditions of uncertainty from the development of the pandemic. In addition, the financial support paid within the fiscal measures, which were taken for dealing with the crisis caused by COVID-19 and for mitigating the effects on the labor market, also affected the dynamics of deposits during the year, as well as the disposable income.

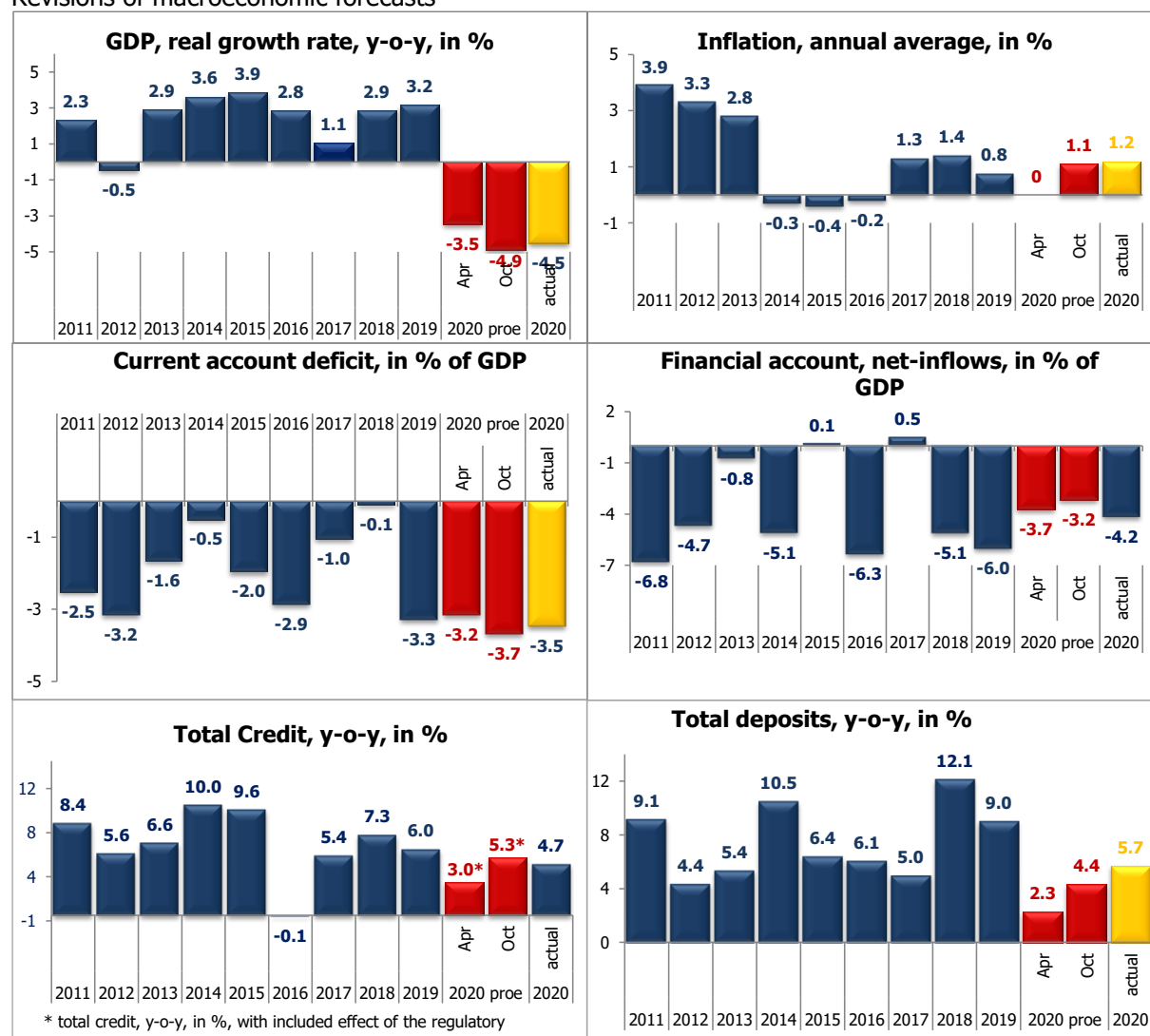
¹ During the first quarter of 2021, the National Bank additionally reduced its policy rate, whereby it fell to 1.25%.

Domestic consumer prices in 2020 registered a slight increase. Namely, the general price level in 2020 registered an average annual growth of 1.2%, mostly due to the growth of food prices, amid a smaller positive contribution of core inflation, while the energy component made a negative contribution. This performance is in line with the forecasted inflation rate for 2020 of the October forecasts, which resulted in an upward revision of the expected rate with the April forecasts. Namely, despite the predominantly downward pressures from import prices and the reduced domestic demand, the slight acceleration in the domestic inflation in 2020 partially reflects the developments related to COVID-19, i.e. the more pronounced consumption of certain products and services, as well as the increases in the prices of an administrative and regulatory nature, and the limitations on the supply side caused by the global health and economic crisis also had a certain effect.

In terms of economic activity, under the influence of the pandemic shock, negative trends were observed during the year, expressed through the deterioration in the business activity, which affected the confidence and expectations of companies and consumers. The domestic economy in 2020 registered a real fall of 4.5%, which is within the expectations.

Chart 5

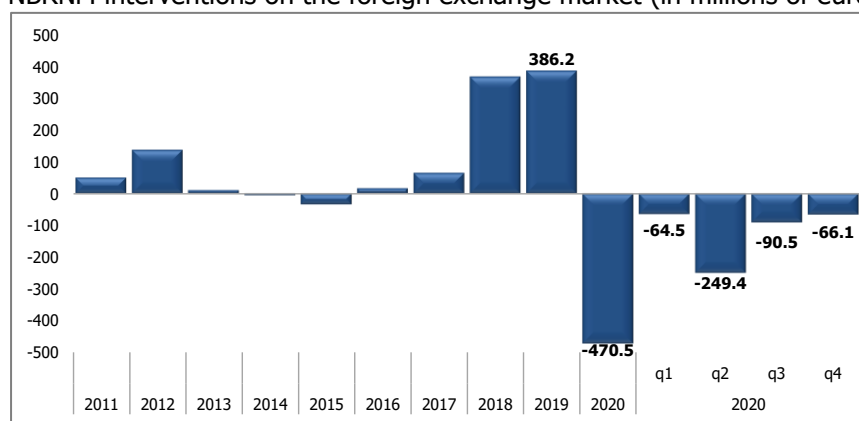
Revisions of macroeconomic forecasts



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

Foreign reserves have registered continuing growth in the past few years, and this trend continued also during 2020, whereby the reserves were constantly maintained at an appropriate and safe level. In conditions of a crisis caused by the pandemic, the growth of foreign reserves in 2020 is primarily supported by the government borrowing in the international financial markets, amid countercyclical fiscal setup. On the other hand, the National Bank intervenes with net sale of foreign currency in order to maintain the balance between supply of and demand for foreign currency. Most of the interventions on the foreign exchange market by the National Bank were concentrated in the period March - July, i.e. in the acute phase of dealing with the pandemic, but from then onwards the needs for intervention are significantly reduced. A major factor for the interventions is the significantly reduced supply of foreign currency from the currency exchange market, whose substantial annual fall was also the main factor for the small deepening of the current account deficit. However, the solid positive financial flows within the financial account of the balance of payments enabled full financing of the current account deficit and further growth of the foreign reserves.

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



Source: NBRNM.

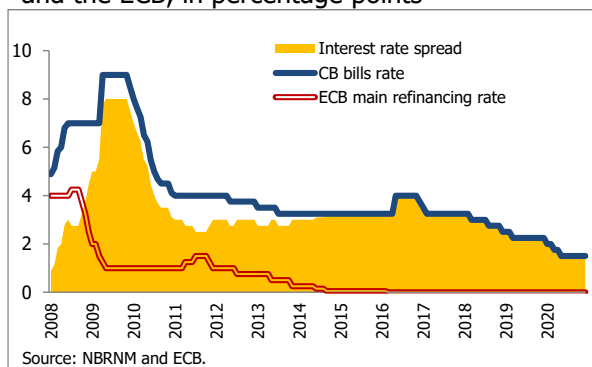
Private sector savings also increased during the year, with the pandemic-related uncertainty having some impact on the maturity and currency preferences of economic agents. The annual growth of total deposits in 2020 was largely a result of the increase in demand deposits and foreign currency deposits, while domestic currency deposits decreased, which is a common in case of a crisis. In conditions of growing risk perceptions of the economic agents, during the year an increase in short-term deposits at the expense of long-term deposits was registered, as well as a moderate increase in the degree of euroization². From a sectoral point of view, the annual growth of total deposits derives almost equally from both (household and corporate) sectors. In terms of credit flows, they continue to increase during 2020, but more moderately compared to the previous year. In order to mitigate the consequences of the crisis, the National Bank adopted a series of measures aimed at reducing the financing costs through bank loans, as well as providing additional liquidity in the banking system, in order to stimulate lending activity. Household loans remain the sector with the largest contribution to credit growth, with a positive contribution of corporate loans, although smaller than the previous year.

Given the application of fixed nominal exchange rate of the denar against the euro, the 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 2020, the European Central Bank (ECB)

² Share of the foreign currency deposits in total financial system deposits

continued to apply a relaxed monetary policy through a series of quantitative easing measures, while keeping the policy rates at the same level. As a result of the decrease in the policy rate of the National Bank, the spread between the interest rates of the National Bank and the ECB narrowed from 2.25 percentage points to 1.5 percentage points. Relating to the interest rates of banks in the domestic economy, the spread between the denar interest rate and the interest rate on foreign currency deposits in 2020 registered a minimal decrease (from 1.0 percentage point to 0.8 percentage points), as a result primarily of the downward movement of the interest rate on denar deposits, given minimal decrease of the interest rate on foreign currency deposits.

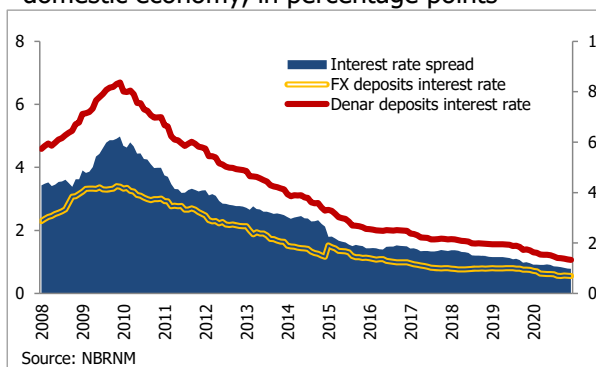
Chart 7
Spread between the policy rates of the NBRNM and the ECB, in percentage points



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 environment³

In 2020, global economic activity was affected by the emergence and spread of the new COVID-19 virus infection, first in China and then worldwide, followed by the introduction of strong restrictive measures for traveling in and out of countries in the second quarter, to prevent the spread of the pandemic and to protect public health.

As a result, the demand decreased, the globalization process and supply chains were disrupted and the global trade fell sharply, which hit the economies really hard. Both fiscal and monetary authorities responded quickly in order to mitigate the negative effects of the crisis. Although in the third quarter there was a slight improvement in activity so the measures eased, however, in the last quarter of the year, with the outbreak of the second wave of the pandemic, some countries, primarily European, reintroduced the restrictive measures, although to a lesser extent than in the second quarter and were aimed mainly at sectors with greater social interaction.

Consequently, in 2020 the global economic activity decreased significantly and the estimated decrease equaled 3.5% (after growth of 2.8% in 2019), which is estimated to be the largest global recession since the Great Depression in the 1930s. The fall in economic activity is synchronized and widely dispersed and is observed in developed, emerging and in developing countries, with the exception of China, which recorded growth in activity, although slower (growth of 2.3%, versus growth of 6% in 2019), stimulated by net exports and investments, in conditions of stimulating fiscal policy⁴. Within the developed countries, in 2020 relatively high rates of decrease were registered by the economies of the United Kingdom (fall of 10%, compared to growth of 1.4% in 2019), the euro area (fall of 7.2%, versus growth of 1.3% in 2019) and Japan (fall of 5.1%, versus small growth of 0.3% in 2019), while a more moderate decrease was registered in the US economy (a fall of 3.4%, versus growth of 2, 2% in 2019). In almost all these economies, the unfavorable performance is due to the decrease of almost all components of the demand, mostly due to reduced household consumption and exports, as opposed to government consumption, which is growing due to increased costs associated with the pandemic. Only the United Kingdom registered a decrease in all components, including public consumption. However, by the end of 2020, vaccines from different manufacturers were approved for use, and in December the immunization process began in several countries, which contributed to increased optimism for a faster end to the pandemic.

The expectations for the global economy growth in the coming period are marked by extreme uncertainty related to the development of the pandemic and the prospects for dealing with it. The emergence of the second wave of the pandemic at the end of 2020 and the re-introduction of restrictive measures are limiting factors for short-term growth. On the other hand, the agreement between the EU and the United Kingdom from December 2020 related to Brexit, means one significant negative risk less. Upward risks for the global growth in the following period are the more favorable developments referring to production and distribution of vaccines, improvement of and greater effectiveness of the therapies for dealing with the virus, as well as the possibly greater fiscal stimulus than expected. On the other hand, the downward risks include the new accelerated spread of the infection due to virus mutations, the possible introduction of significantly tougher measures for dealing with the virus than

³ The analysis is based on the IMF's 'World Economic Outlook, updated in October 2020 and January 2021; the World Bank's World Economic Outlook, January 2021; the quarterly reports of the National Bank.

⁴ China recorded real annual economic growth of 3.2%, 4.9% and 6.5% in the second, third and fourth quarter of 2020, respectively, compared to a decrease of 6.8% in the first quarter of the year.

expected, as well as the slower progress in the medical treatment against the virus, including the slower vaccination process. Also, the early termination of the economic support policies may lead to an adverse effect on the labor market and on the companies' solvency, and the tightening of the financing terms may hamper the access to financial markets for some countries. All of this can contribute to a smaller long-term global growth.

The average annual inflation rate in 2020 slowed down slightly to 3.2% (3.5% in 2019) and is largely a reflection of reduced global demand, as well as low energy prices that prevailed throughout the year, largely due to the spread of the pandemic globally. Observed by groups of countries, the inflation rate in 2020 in developed economies slowed down to 0.7% (compared to 1.4% in 2019), while in the emerging economies it registered a minimal slowdown and amounted to 5% (5.1% in 2019).

Chart 9
Global economic growth (in %)

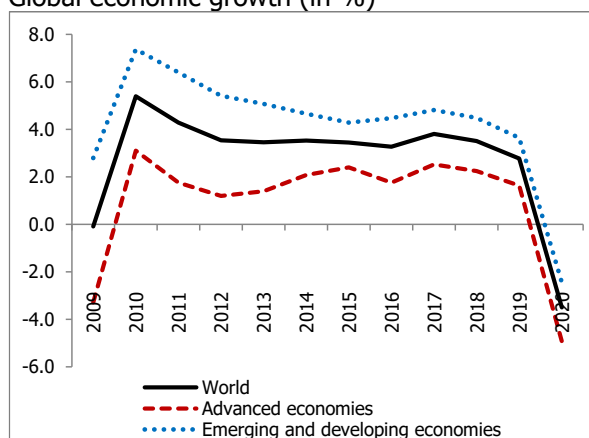


Chart 10
GDP growth in developed countries (in %)

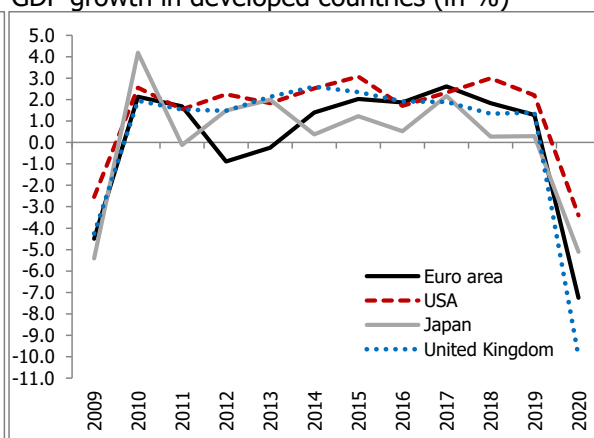
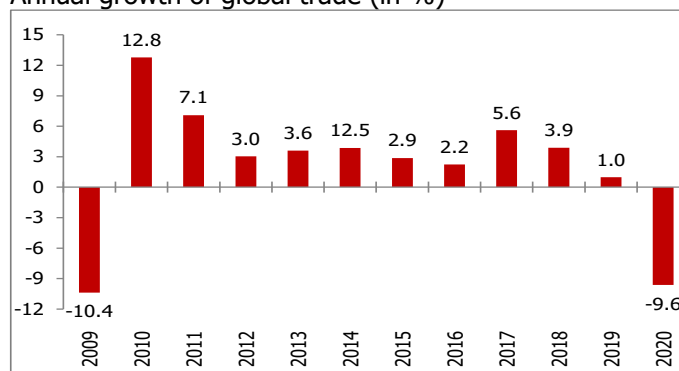


Chart 11
Annual growth of global trade (in %)



Source: World Economic Outlook, October 2020 and update January 2021, IMF

When it comes to quantitative indicators that reflect the external environment of the Macedonian economy, the estimated foreign effective demand registered a relatively high annual decrease in 2020, while the foreign effective inflation slowed down compared to the previous year. Namely, in 2020, foreign effective demand is estimated to fall by 5.6% (compared to the growth of 1.4% in 2019), in conditions of unfavorable economic performance in all trading partner countries, with the largest negative contribution of Germany, Italy and Greece. Such movements are a result of the pandemic spread and the introduction of restrictive measures in the countries to prevent further spread of the infection, especially in the second quarter. As for the foreign effective prices for 2020, on average, they registered small growth of 0.3% (slowdown compared to the growth of 1.5% in 2019), with

the slowdown being due to lower price pressures in all countries, with the largest contribution from Germany, Slovenia and Croatia.⁵

Chart 12
Foreign effective demand

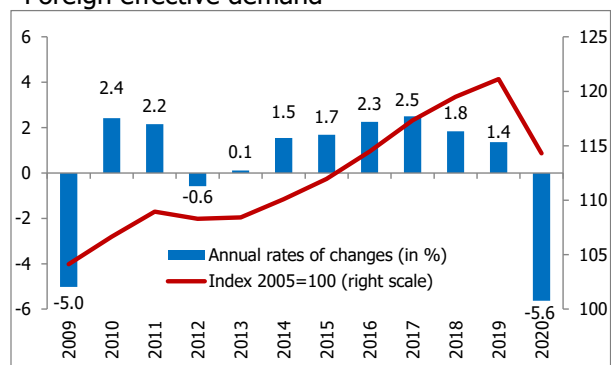
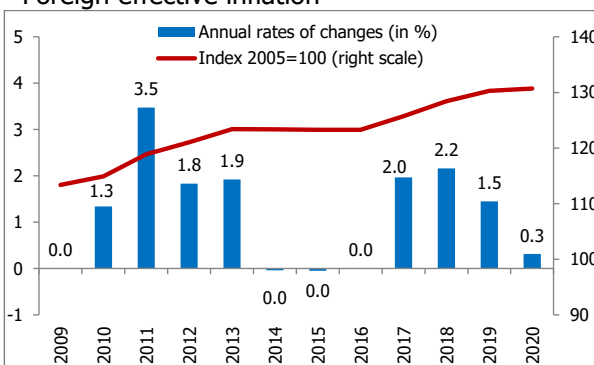


Chart 13
Foreign effective inflation



Source: National statistical offices and National Bank calculations⁶.

At the primary products' markets, in 2020 energy prices dropped significantly, food prices remained relatively stable on average, while metal prices increased slightly. Thus, in 2020, the average price of oil equaled Euro 37 per barrel and was lower by 35.2% compared to 2019 (Euro 57.2 per barrel), largely as a result of poor global demand due to the spread of the pandemic, despite the agreement on limited oil production by OPEC + members throughout the year. The analysis by months shows that in April 2020 the lowest price since 2020 has been registered⁷, which was followed by certain price recovery and its stabilization in conditions of gradual relaxation of restrictive measures. In the last two months of the year, oil prices once again recorded relatively high monthly growth rates, largely as a result of expectations for increased demand, amid intensified market optimism after the announcement of high efficiency of several vaccines and the beginning of the vaccination process at the end of 2020 in some developed countries, as well as the expectations for further limited production by the OPEC + member countries. The basic metals price index in 2020 increased slightly by 1.2%.

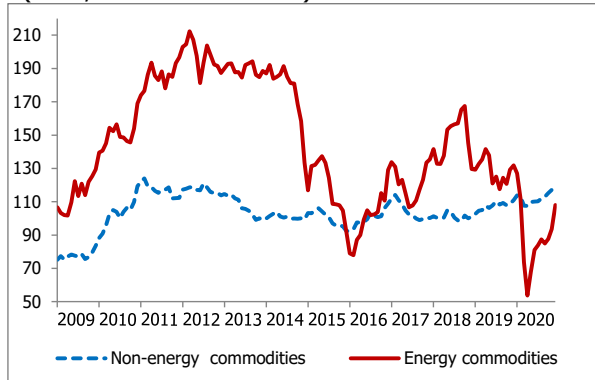
The rise in metal prices, which began in the second half of the year, is mainly due to increased demand from China, whose economic recovery began in the second quarter of the year and further intensified throughout the year.

⁵ Inflation in Croatia has been adjusted for the changes in the exchange rate.

⁶ 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.

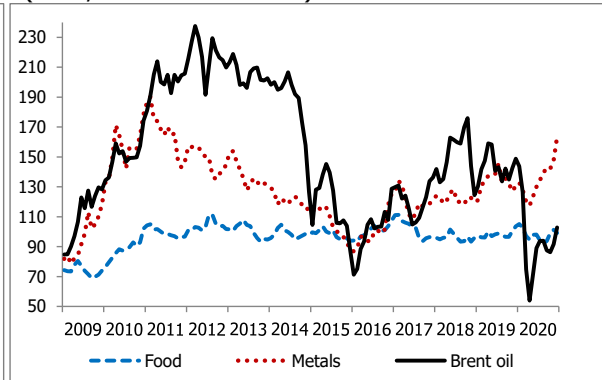
⁷ In April, 2020, the brent oil price reduced to 21.5 euros per barrel, which is the lowest price since December 2001 (20.8 euros per barrel).

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



Source: IMF's database on primary commodity prices.

Chart 15
Monthly movement of prices of crude oil, metals⁸ and food
(euro, index: 2010=100)



In 2020, the central banks of developed countries implemented stimulating monetary policies to mitigate the negative effects of the pandemic. Thus, the FED lowered the interest rate in two occasions in March, for a total of 150 basis points, reducing it to an interval from 0% to 0.25%. Also, the FED took measures to increase the bid amount when performing repo operations, change the calendar of repurchased treasury securities depending on the maturity structure, as well as increase the amount of repurchased securities within the quantitative easing program⁹, introduced additional measures to support lending to households and companies¹⁰ and conducted a coordinated action with several central banks in order to further improve the provision of liquidity in US dollars, as well as measures to maintain the capitalization of the banking system at high level.¹¹ Also, in August, the FED released the changes in the strategy for monetary policy conduct, according to which a room is left for higher inflation rate in certain periods than the previously set target inflation of 2%¹², in line with the commitment for average inflation rate of 2% during a longer period of time.

After a long period of unchanged monetary policy (from August 2018), in March 2020 the Bank of England reduced the interest rate in two occasions from 0.75% to 0.1%. In addition, in order to support the economy, it introduced a package of measures to support lending to small and medium-size enterprises, together with the Ministry of Finance established a fund to support companies by purchasing commercial securities with a maturity of up to one year (effective until March 2021), and during the year on three occasions decided to increase the volume of repurchase of government bonds (with a total amount of British pound 875 billion). The Bank of Japan did not change the interest rate in 2020 (-0.1%), whereby the monetary easing was made through further significant supply of funds by

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

⁹ In March 2020, the FED adopted a decision on increasing the purchase of government securities worth at least US dollar 500 billion and by at least US Dollar 200 billion the purchase of mortgage-backed securities issued by government agencies in the coming months. Also in December 2020, the FED announced it would continue to buy government securities worth at least US dollar 80 billion a month, as well as mortgage-backed securities issued by government agencies worth at least US dollar 40 billion a month.

¹⁰ One of the measures is the introduction of a Small Business Administration's Paycheck Protection Program (PPP).

¹¹ It refers to the measure by which large banks (those with total assets exceeding US dollar 100 billion) are prohibited from repurchasing shares, and additionally the payment of dividends will be limited and will depend on the current profit, which would contribute to preserve the strong capital positions of the banks.

¹² On 27 August 2020, the FED announced an update of its long-term goals and strategy for monetary policy conduct and significant changes related to: 1) maximum employment, where the decisions will now be based on estimates of downward deviations from the maximum level of employment, instead of the current practice of deviations from the maximum level in both directions; 2) price stability, whereby the FED has adjusted its strategy to achieve the long-term goal - inflation of 2%, by trying to achieve inflation that averages 2% in a certain period of time, i.e. after the periods when the inflation has been consistently below 2%, the respective monetary policy will aim at achieving inflation moderately above 2% over a certain period.

applying various operations, including repurchase of government securities, providing domestic and foreign currency liquidity to stabilize financial markets and various measures to facilitate the financing of companies, such as the monetary relief program through increased repurchase of corporate securities and the opening of a special fund to facilitate the financing of the private sector due to the new virus. In December, it was decided that both programs will be implemented for an additional 6 months, which would last until September 2021.

The European Central Bank (ECB) maintained the same interest rate (0%), but took a number of quantitative easing measures throughout the year. Thus, in March it introduced a temporary additional amount of quantitative easing of Euro 120 billion, which was applied until the end of 2020, in addition to the already set amount of securities repurchase in the amount of Euro 20 billion per month (APP), and started with implementation of the temporary program for the purchase of securities for immediate support of the economy due to the pandemic (PEPP), whose volume by the end of the year reached Euro 1.850 billion.¹³ In addition, the conditions under the third package of targeted long-term repo operations (TLTRO III) were eased on three occasions, a set of security relief measures was adopted, and a new series of 7 long-term pandemic-related repo operations was conducted (PELTRO), which will continue during 2021, as well. At the same time, the ECB once again advised banks to be extremely careful when paying dividends and buying shares¹⁴, in order to maintain the stability of the financial system in a pandemic. In addition, in June the ECB decided to introduce a swap and repo lines (EUREP) for central banks outside the ESCB, including a repo line for the NBRNM¹⁵, whose validity in December was extended to March 2022 (previously until June 2021).

¹³ In March 2020, it was announced that the program will amount Euro 750 billion, but then during the year it increased twice by Euro 600 and 500 billion, in June and December, respectively), while simultaneously shifting its duration, from the initially projected date - end of 2020, in June extended to at least until June 2021 and in December - at least until the end of March 2022.

¹⁴ The ECB called on banks to refrain from paying dividends or to limit payments until 30 September 2021 (previously until 27 March 2021), and recommended that if banks decide to pay dividends or repurchase shares, the amounts should be below 15% of the total cumulative profit of the banks in the period 2019-2020 and not to be higher than 20 b.p. from the core capital level.

¹⁵ In August 2020, the European Central Bank (ECB) announced that it had approved a repo line of Euro 400 million to the National Bank of the Republic of North Macedonia to provide foreign currency liquidity in euro to financial institutions in the Republic of North Macedonia through the Central Bank in order to meet the possible needs for liquidity in euros in conditions of market disturbances due to the shock of COVID-19, where the repo line will be valid until March 2022 (initially until June 2021). However, so far (as of March 2021), the National Bank has not used funds from the approved repo line, given the constant maintenance of both denar and foreign currency liquidity of the banking system at an appropriate level.

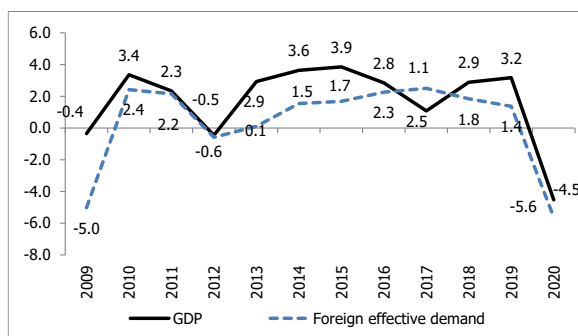
III. Macroeconomic developments in 2020

3.1. GDP and inflation

According to the estimated data of the SSO, in 2020 a decrease in the real GDP of 4.5% was registered¹⁶ (an increase of 3.2% in 2019). This decline is due to the health and economic crisis caused by the COVID-19 pandemic, which led to a decrease in external demand, temporary disruption of production chains, as well as greater restraint of economic agents, amid pronounced uncertainty and measures taken to limit the spread of the virus. In such circumstances, in 2020, both domestic and export demand decreased. Viewed by individual components, the increase is perceivable only in public consumption, given the need to protect and maintain public health in a pandemic. During 2020, policy makers took coordinated measures to mitigate the effects of the health crisis on the economy.

Chart 16

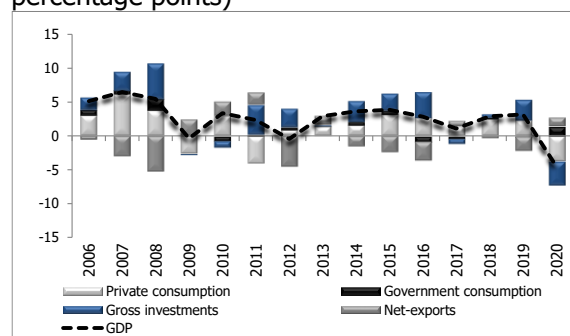
GDP and foreign effective demand (annual real growth rates, in %)



Source: State Statistical Office and Eurostat, NBRNM calculations GDP data for 2019 are preliminary, and data for 2020 are estimated.

Chart 17

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

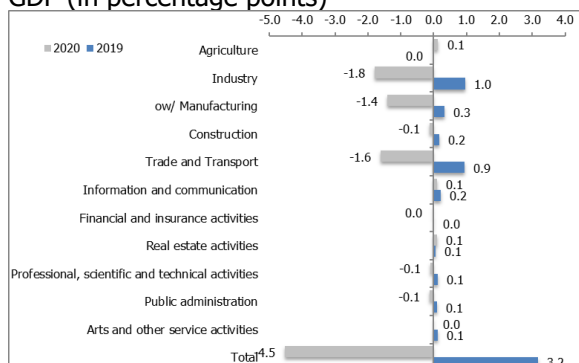


Viewed from the production side, the decrease in the economy during 2020 is widely dispersed, and is most pronounced in the part of industry and activities of the group "trade, transport and hospitality", sectors that were key to growth in previous years. Analyzed granularly, through the industrial output index, the reduced industry is mainly due to unfavorable performance in the manufacturing industry, mainly in the activities where export facilities with foreign capital related to the automotive industry are active, such as the production of machinery and equipment and the production of motor vehicles, and a negative contribution is noticed in the production of electrical equipment. In the traditional activities, a significant negative contribution is registered in the production of clothing and textiles, the production of food products and the production of beverages. The decrease in trade is almost entirely due to the developments related to the pandemic, and viewed separately, by types of turnover, reduced turnover has been registered in both, wholesale and retail trade. In accordance with the restrictions on the movement of the population, both locally and internationally due to the pandemic, the transport registered a reduced activity in all types of traffic, except for freight road traffic. Hospitality is the most affected sector of the pandemic where the number of tourists, overnight stays, as well as the total turnover almost halved. Furthermore, the **construction sector** in 2020 registered more moderate fall than other sectors, with weaker activity in the field of buildings construction, in conditions of favorable developments in civil engineering related to public investments in road infrastructure. On the

¹⁶ In 2020, real GDP was as followed: Q1: 0.9%, Q2: 14.9%, Q3: -3.3% and Q4 0.7%.

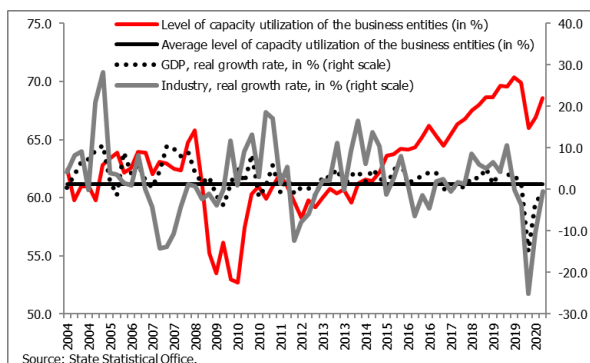
other hand, in agriculture, information and communications and real estate activities, the activity registered real growth in 2020.

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



Source: State Statistical Office and National Bank calculations GDP data for 2019 are preliminary, and data for 2020 are estimated.

Chart 19
GDP, industry and capacity utilization



Viewed from the aspect of aggregate demand, in 2020 domestic demand has a negative contribution, given a positive contribution to net exports. Within the domestic demand, the largest negative contribution has the **household consumption**, amid declining disposable income and unfavorable labor market movements, but also with greater restraint from consumption related to job uncertainty and future incomes. The decrease in household consumption was partially mitigated by measures to financially support citizens. Investments also had a significant negative contribution, which were strongly affected by the weak demand and high levels of uncertainty. The decrease in investments in 2020 is in line with the registered decline in value added in construction and the reduced import of investment products, and the fall was mitigated by the growth of public investment in infrastructure (seen through the growth of construction works in the field of civil engineering). On the other hand, **public consumption** has grown rapidly and has acted counter cyclically, as a result of increased support from the health sector and local authorities for dealing with COVID-19.¹⁷ In conditions of reduced foreign demand and temporary disruption of the global production chains and logistics, the **export** registered a decrease in 2020. Reduced export activity, as well as the decrease in domestic demand, caused downward adjustment also in the **import** of goods and services, which would also reduce imports, whereby net exports made positive contribution to growth.

In 2020, the average inflation rate remained low and stable at 1.2%, mainly due to the growth of food component prices, and to a lesser extent, the positive contribution of core inflation, while energy prices had a small negative contribution. The performance in 2020 indicate a slight acceleration in inflation compared to the performances in 2019, when the inflation amounted to 0.8%. In conditions of mainly downward pressures from the import prices (severe drop of oil price, more moderate foreign effective inflation and small increase in food prices) and reduced domestic demand, the slight acceleration in the domestic inflation in 2020 partially mirrors the developments related to COVID-19, i.e. the more pronounced consumption of certain products and services, as well as the increases in the prices of an administrative and regulatory nature, with the limitations on the supply side caused by the global health and economic crisis also having a certain effect. Analyzed dynamically, the

¹⁷ Throughout the year, most of the growth in public consumption is explained by higher transfers to the health fund, transfers to local governments, as well as higher wage expenditures.

growth of consumer prices accelerated during the year, from 0.6% in the first quarter, reaching 2.2% in the fourth quarter of the year.

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

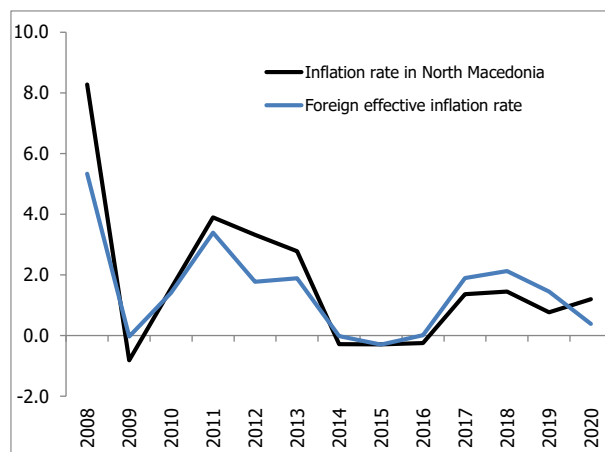
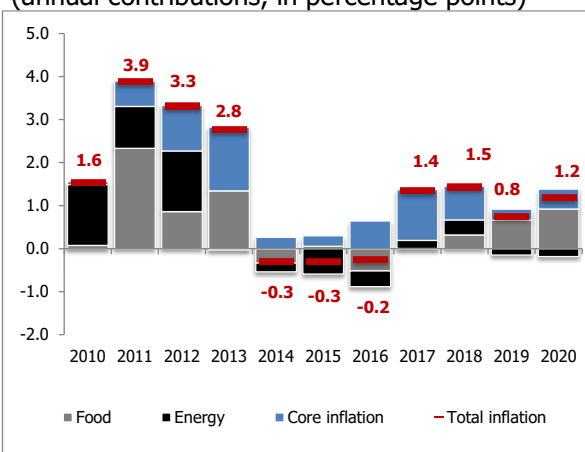


Chart 21
Volatile (food and energy) and long-term component of inflation (annual contributions, in percentage points)



Source: State Statistical Office, Eurostat and NBRNM calculations.

Regarding the main components of the consumer price index, the food component has the highest positive contribution to the inflation rate (growth of 2.6% and contribution of 0.9 percentage points in the overall inflation), reflecting the higher prices in most subgroups within the index, i.e. moderately higher prices of bread and cereals, meat, dairy products, oil and fat, as well as fruit prices. An additional positive contribution to the growth of consumer prices has the base component (growth of 0.9% and contribution of 0.5 percentage points to headline inflation), which is due in large part to the administrative changes, related to the increase in excise duty on tobacco¹⁸, at the same time more pronounced downward pressures from the prices of transport services in air traffic. On the other hand, the energy component has a small negative contribution to the annual growth of domestic prices (decrease of 1.4% and a contribution of -0.2 percentage points to headline inflation), influenced by the high decrease in oil prices in the world stock exchanges, where this effect was partially offset by the decision to increase excise duties on some derivatives¹⁹ from April 2020 and the decision to increase the domestic price of electricity²⁰ from August 2020.

3.2. Labor market

The unfavorable shifts in the economy, caused by the COVID-19 pandemic, have had repercussions on the labor market, as well.²¹ However, the impact of the pandemic on this market segment was relatively moderate, and the negative effects were concentrated in the second quarter of 2020. Namely, this was the period of the acute phase of dealing with the pandemic, when the strictest measures were taken to prevent the spread of the viral infection.

¹⁸ The annual growth of tobacco price reflects the increase in the prices of cigarettes in March and July 2020, in consistence with the annual planned increase in excise duties on cigarettes by Denar 0.20 per piece as of 1 July 2023. Also, the changes in the Law on Tobacco, Tobacco Products and Related Products, which requires all packs of cigarettes to have 20 cigarettes by November 2020 (previously there were packs with 19 cigarettes) also contributed to the growth, which together with the increased amount for the excise collected by cigarette, contributed to the increase in producer costs.

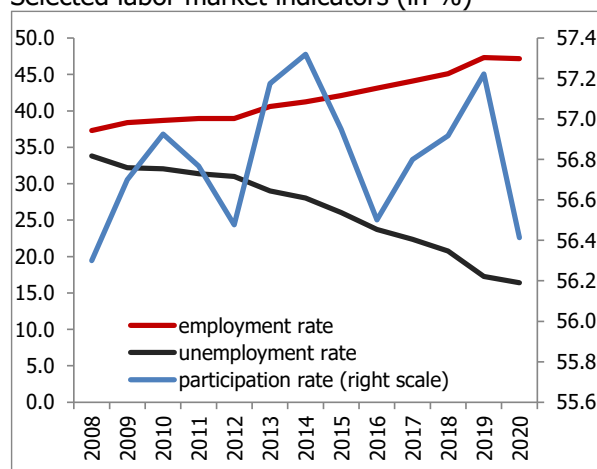
¹⁹ This decision was made to mitigate the economic consequences of the increased costs of dealing with the coronavirus and providing funds for regular repayment of budget needs. The proposed mechanism enables gradual return of the existing amounts of excises in conditions of normalization of market prices.

²⁰ With the decision of the ERC, starting from 1.8.2020, the price of electricity is higher by 7.4%.

²¹ Labor market analysis was made by using quarterly labor force surveys, that is, the annual indicators for 2020 were derived as an average of the published quarterly data.

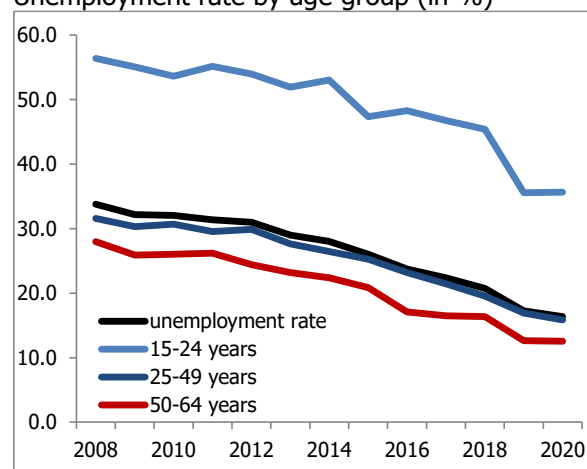
During 2020, several anti-crisis measures²² were adopted in order to mitigate the impact of the crisis on the labor market, and the implementation of existing active employment measures²³ in support of employment growth continued. The number of employed persons in 2020 decreased by 0.3%, at the same time reducing the employment rate by 0.2 percentage points to the level of 47.1%. Analyzed by sectors, in 2020, the decrease in employment is mostly related to the agricultural sector and to a lesser extent to industry, primarily due to the decrease in the number of people employed in energy sector and construction. Also, a decrease in employment is observed in several service activities that were directly affected by the pandemic, primarily in the activities related to real estate, transport and storage, administrative and ancillary service activities, as well as in the activities related to accommodation and food services. On the other hand, in 2020, employment growth has been registered in health care, wholesale and retail trade and repair of motor vehicles and motorcycles, information and communications, as well as in education.

Chart 22
Selected labor market indicators (in %)



Source: State Statistical Office and National Bank calculations

Chart 23
Unemployment rate by age group (in %)



More pronounced negative shifts during the year have been registered on the labor supply side. The total active population decreased by 1.4%, and the simultaneous increase in the inactive population of 1.9% resulted in downward movement of the activity rate (of 0.8 percentage points) that equaled 56.4%. Despite the unfavorable developments on both the demand side and the labor supply side, the number of unemployed persons decreased by 6.3% and the unemployment rate in 2020 was reduced to the historically lowest level of 16.4% (annual decrease of 0.9 percentage points). In terms of age groups, the decrease in the overall unemployment rate is explained by the lower unemployment of persons aged 25 to 49, while unemployment in the category of young people aged 15 to 24 registered a minimal increase.

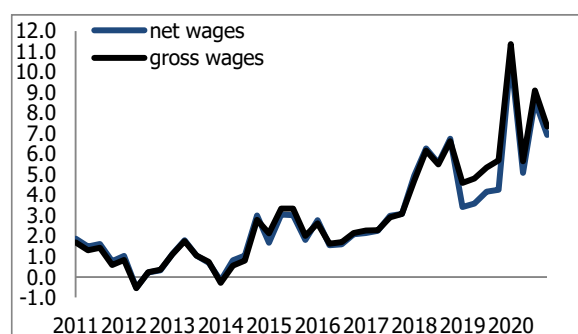
The growth of average wages paid continued in 2020, in large part due to the transmitted effect of wage increases in late 2019 and additional increases that were made in early 2020, before the pandemic. Namely, the higher level of wages in 2020 is partly due to

²² For more information on the Index see <https://vlada.mk/ekonomski-merki-covid19>

²³ In 2020, the Ministry of Labor and Social Policy and the Employment Agency continued to implement active measures and programs aimed to increase employment.

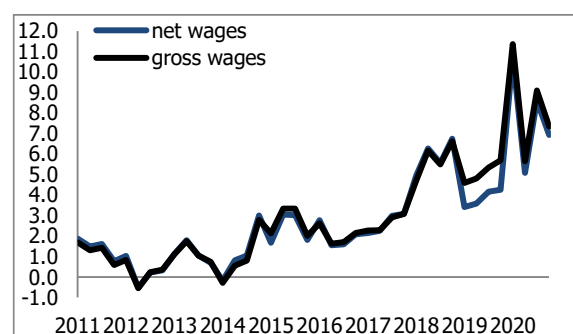
the increase in the level of the minimum net wage (at the end of 2019²⁴ and in July 2020²⁵), the increase in wages in the public sector²⁶, as well as the effect of the measure for subsidizing contributions due to wage growth.²⁷ Thus, nominal net and gross wages²⁸ registered an annual growth of 7.8% and 8.3%²⁹, respectively (2019: 3.9% and 5.1%, respectively). An upward correction of the net wages was registered in almost all sectors of activities, with particularly high growth being registered in the activity "information and communications" (11.3%), which can be related to the trend of increasing digitalization, additionally emphasized in pandemic conditions. Furthermore, growth was registered in the activities "education" (11.2%), "health care and social care protection" (9.6%), "wholesale and retail trade; repair of motor vehicles and motorcycles" (8.8%), "processing industry" (8.5%), "construction" (8.4%), "agriculture" (8.4%) and "other service activities" (8.3%). A decline in wages in 2020 was registered only in the activity "hotels and restaurants", an activity that was most affected by the pandemic. Amid growth in general consumer prices, net and gross wages registered a real growth of 6.5% and 7%, respectively.

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



Source: State Statistical Office and National Bank calculations

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



²⁴ Previously, in addition to the regular adjustment in April 2019, the minimum wage was extraordinarily increased in December 2019 (by about Denar 2000, net) and amounted to Denar 14,500, net (Law on Minimum Wage, Official Gazette of the Republic of North Macedonia No. 239/19).

²⁵ According to the announcement of the Ministry of Labor and Social Policy, published in the Official Gazette of the Republic of North Macedonia No. 75/20 and the Decree with legal force on the enforcement of the Law on Minimum Wage in the Republic of Macedonia Official Gazette of the Republic of North Macedonia No. 88/20, the minimum net wage in July 2020 increased by 3%, i.e. by Denar 434. The minimum wage in gross amount, starting from July 2020 to March 2021 is Denar 21,776 (previously Denar 21,107), i.e. the minimum wage in net amount is Denar 14,934 (previously Denar 14,500). The regular adjustment for increasing the minimum wage (with the increase for the previous year of the average wage paid in the RNM, the consumer price index and the real GDP growth - one third of the growth of each indicator, respectively) was made even before the crisis caused by the COVID-19 pandemic, but with a Decree, the Government put it under moratorium until the end of the state of emergency (i.e. for the period April-June 2020).

²⁶ Starting with the September 2019 wage, there was a 5% increase in the wages of health care and social care workers and employees in education, police, defense and the entire public sector. In January 2020, the wages in education were additionally increased by 10%, and from February 2020, the wages of employees in health care were additionally increased (growth of 25% for specialists, 15% for general practitioners, 10% for nurses, and by 5% for health associates and ancillary-technical staff).

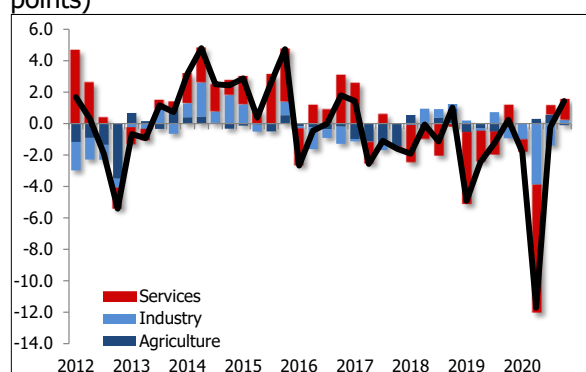
²⁷ According to the Law on subsidizing contributions from compulsory social insurance due to wage increase, which started to be enforced with the payment of the wage from November 2019 (Official Gazette of the Republic of North Macedonia No. 239/19), whereby the subsidizing of contributions is approved 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).

²⁸ 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.

²⁹ 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. The rates at which contributions are paid in 2020 are 18.8% for compulsory pension and disability insurance and 7.5% for compulsory health insurance (previously these rates were 18.4% and 7.4%, respectively).

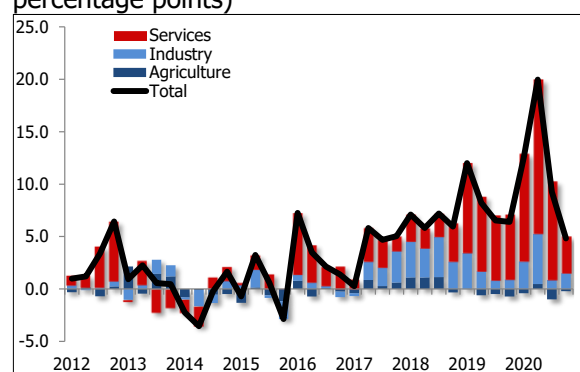
Analyzing competitiveness ratios³⁰, they deteriorated further in 2020. Namely, during the year, labor productivity decreased by 3% (decline of 2% in 2019), as a result of the significant reduction in value added, amid a slight decrease in the number of employees. Observed by sectors, the largest negative contribution comes from the services sector and industry, while agriculture has a minimal positive contribution. In line with the growth of wages and the decline in productivity, the unit labor costs are higher by 11.7% in 2020 (growth of 8.3% in 2019), amid greater increase in labor costs in the services sector, and to a lesser extent in industry, with a decrease in the labor costs in agriculture. Dynamically, competitiveness indicators deteriorated significantly in the second quarter of the year, which was most affected by pandemic management measures. With the gradual economic recovery in the second half of 2020, there are significant improvements in both indicators, so that in the last quarter of 2020, the labor productivity registered a small annual growth of 1.4%, while the increase in the unit labor costs reduced to 4.8%.

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



Source: State Statistical Office and National Bank calculations

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



3.3. Public finances

The public finances were affected the most by the COVID-19 pandemic in 2020. The budget deficit in 2020 deepened significantly and amounted to 8.1% of GDP, compared to the moderate deficit in the past four years, of 2.3% of GDP on average. Similar shifts were recorded in the primary budget balance³¹, which reached 6.9% of GDP, compared to the average primary budget deficit of about 1% of GDP in the past four years. The larger budget deficit is mostly due to the increased budget expenditures, as a reflection of the fiscal measures taken to mitigate the economic consequences of the health crisis. An additional, but significantly more moderate effect was the decrease in budget revenues, amid declining economic activity.

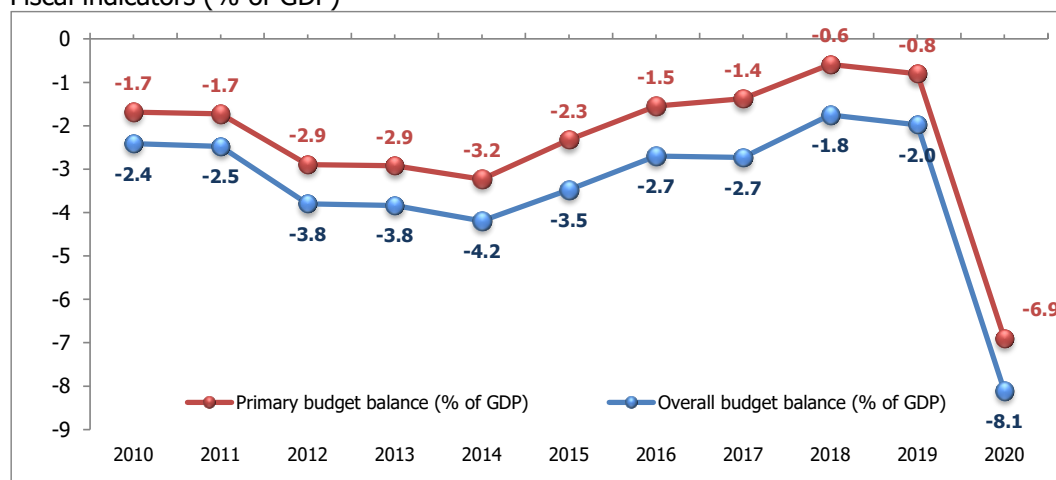
Given the pandemic, as an unexpected global shock from the beginning of 2020, the realized budget deficit in 2020 is significantly higher than the initial plan for the year. For 2020, on two occasions, the deficit was adjusted upwards from the originally planned Denar 17,385 million (2.6% of GDP) to Denar 56,495 million (8.5% of GDP), in accordance with the downward adjustment of budget revenues, on the one hand, and the simultaneous increase

³⁰ 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.

³¹ 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.

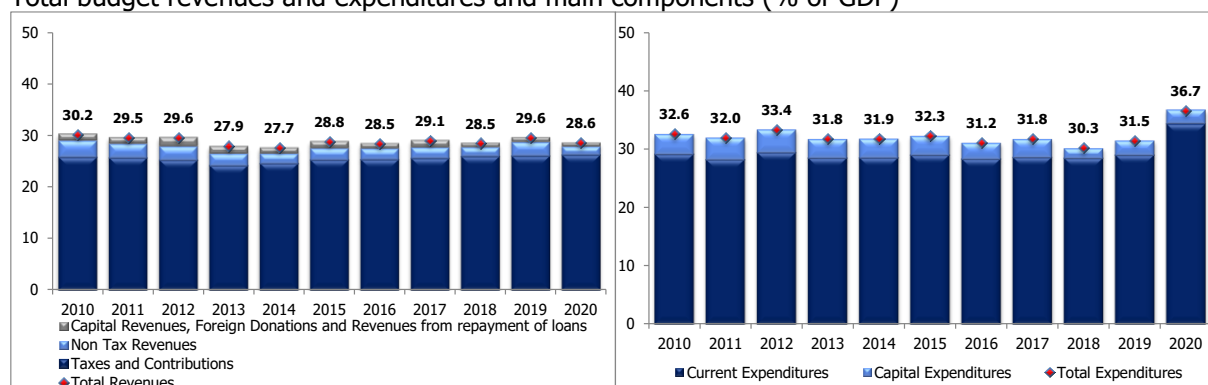
in expenditures, on the other. However, the registered deficit is slightly lower relative to the latest revision.³²

Chart 28
Fiscal indicators (% of GDP)



Source: Ministry of Finance and NBRNM calculations.

Chart 29
Total budget revenues and expenditures and main components (% of GDP)



Source: Ministry of Finance and NBRNM calculations.

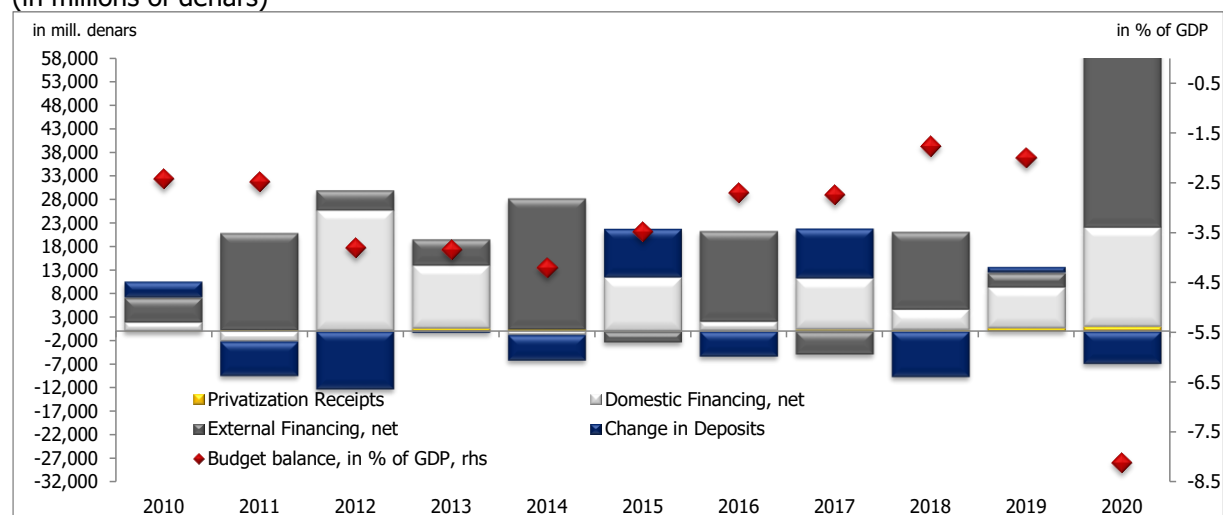
With reduced economic activity, but also tax relief within the anti-crisis measures to mitigate the consequences of the health crisis, total budget revenues in 2020 are lower by 6.9% on an annual basis. Most of the decline in total revenues is due to lower tax revenues. As a result of paid transfers to support enterprises and households and increased health care expenditures, budget expenditures increased significantly by 12% on an annual basis. Expressed in terms of GDP, the share of budget revenues and expenditures in GDP in 2020 was 28.6% and 36.7%, respectively (29.6% and 31.5% in 2019, respectively). Thereby, the realized budget deficit in 2020 was mostly financed through external government borrowing³³, whereby part of the inflows were retained as government deposits with the National Bank. At

³²At its session held on 15 May 2020, the Government of the Republic of North Macedonia adopted a decree with legal force on amending the Budget of the Republic of North Macedonia for 2020 during a state of emergency (Official Gazette of the Republic of North Macedonia No. 126 of 15 May 2020). "On 4 November 2020, the second Budget Revision for 2020 (Official Gazette of the Republic of North Macedonia No. 262 of 4 November 2020) was adopted." With the budget revision, budget deficit of Denar 56,495 million was planned in 2020, while the realized budget deficit amounted to Denar 53,866 million.

³³ At the beginning of April, the International Monetary Fund confirmed financial support for our country, through the Rapid Financing Instrument, in the amount of around Euro 176 million. Also, in June, there was an inflow of funds based on the seventh Eurobond issued in a nominal amount of Euro 700 million, with an annual interest rate of 3.675% and a maturity of 6 years. In October, an inflow of Euro 83 million was made to the government account, in the form of a loan within the macro-financial assistance from the European Commission

the same time, in this period, the government additionally borrowed on the domestic government securities market.

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

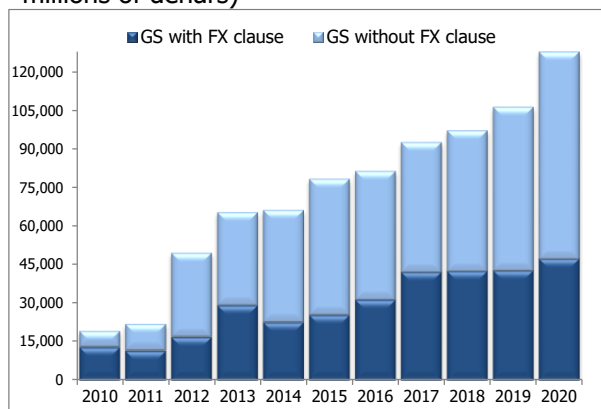


* The negative change of deposits in the structure of financing the budget balance represents an increase in government deposits.
Source: Ministry of Finance and NBRNM calculations.

The increased needs for budget financing in 2020 were partly financed through the domestic primary market of government securities, whereby the stock of issued securities increased by Denar 21,511 million³⁴ and at the end of the year amounted to Denar 127,865 million. Larger part of the new issues of government securities were with a longer maturity than the maturity of the securities, which contributed to increase the average maturity of the issued government securities, and thus to deepen this segment of the financial market, as well as for increasing the share of government bonds in the structure of securities. Favorable movements were also registered in the currency structure seen through the growth of the government securities portfolio in domestic currency. In 2020, the newly issued securities were at lower interest rates.

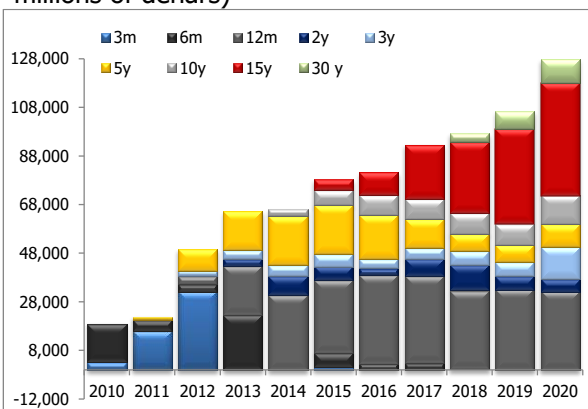
³⁴ The public debt is defined under the Law on Public Debt (Official Gazette of the Republic of Macedonia No. 62/2005, 88/2008, 35/2011, 139/2014 and 98/2019) as the sum of the government debt and the debt of public companies established by the state or municipalities, municipalities within the City 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.

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



Source: Ministry of finance and NBRNM.

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

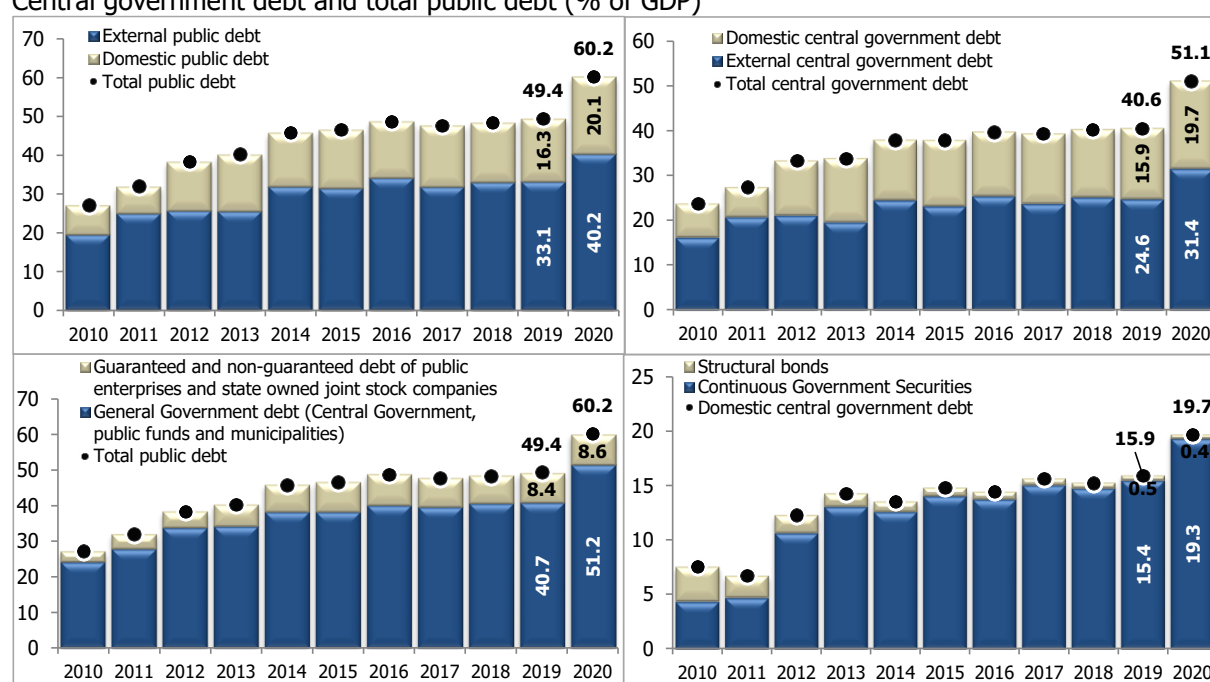


In conditions of higher budget deficit and increased needs for its financing, in 2020 the debt of the central government reached 51.1% of GDP. The annual increase in central government debt is due to the higher external debt (from 24.6% to 31.4% of GDP), given simultaneous increase also in the domestic debt (from 15.9% to 19.7% of GDP). At the end of 2020, the total public debt ³⁵ reached 60.2% of the GDP. The annual increase in public debt is due to the increase in the external public debt (from 33.1% to 40.2% of GDP), as well as the increase in the domestic public debt (from 16.3% to 20.1% of GDP). Within the public debt, the total government debt (debt of the central government, public funds and municipalities) in 2020 increased from 40.7% to 51.2% of GDP, while the debt of public enterprises (guaranteed and non-guaranteed)³⁶ was the level of 8.6% of GDP. At the end of 2020, the share of government debt in the total public debt is 85.1% (82.2% in 2019), while the share of the debt of public enterprises (guaranteed and non-guaranteed) in the total public debt is 14.3% (17% in 2019).

³⁵ 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.

³⁶ 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)

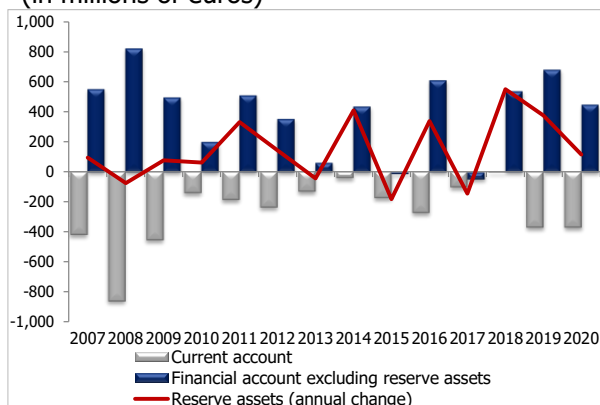


Source: Ministry of Finance and NBRNM calculations.

3.4. Balance of payments, IIP and external debt

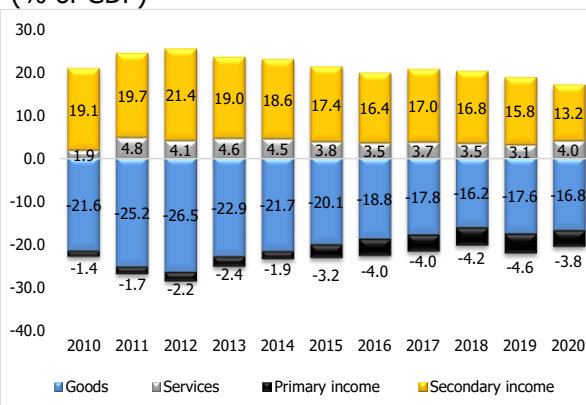
During 2020, in conditions of declining world trade and temporary cessation of global production chains, significantly reduced traveling, high uncertainty and predominantly unfavorable external environment caused by the outbreak and spread of the COVID-19 pandemic, the current account deficit of the balance of payments remained moderate. Thus, the negative balance in current transactions registered a minimal annual widening of 0.1 percentage point and reached 3.5% of GDP. In terms of components, the deepening of the current account balance as a whole arises from the reduction of the surplus in the secondary income as a result of significantly lower net inflows from the exchange operations. Restrictive measures to prevent the virus spread significantly reduced the international movement of passengers, which caused a larger downward correction in foreign exchange inflows through informal remittances and a corresponding downward adjustment of the net purchased cash on the foreign exchange market. On the other hand, there is an increase in foreign exchange inflows through formal channels (personal transfers). These unfavorable movements were largely mitigated by the improvement in the services surplus, due to the more pronounced downward adjustment on the import side, the lower deficit in primary income, as well as the reduced trade deficit, registered in conditions of larger decrease in imports than the decrease in exports of goods, which is largely due to the relatively rapid adjustment of export capacities to the new situation and the solid recovery of production chains. The better performance in the "services" category results from the higher surplus in other business services, the almost neutral balance in construction (compared to last year's high deficit) and the increased surplus in telecommunications, computer and information services.

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



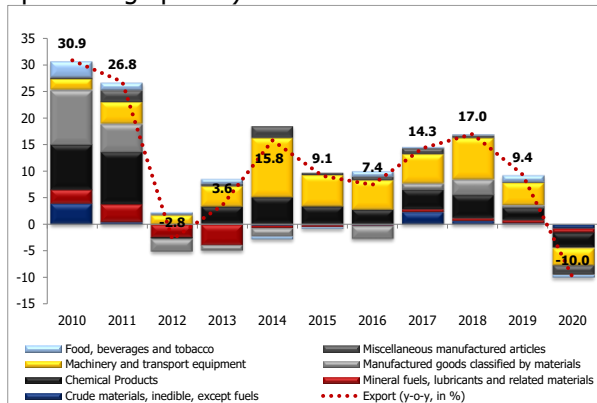
Source: NBRNM.

Chart 35
Main current account components
(% of GDP)



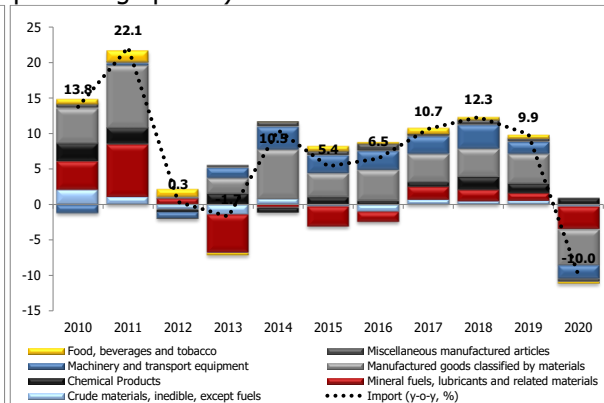
The deficit in foreign trade in 2020 narrowed annually by 9.8% (or 1.3 percentage points of GDP), compared to the widening in the previous year. The movements in both foreign trade components were significantly influenced by the COVID-19 virus pandemic and the economic challenges as a result of the health crisis. The export of goods decreased by 10% on annual basis, mainly due to lower export of equipment and machinery, as well as the decrease in export of chemical products and clothing and textiles. Such performance is mostly caused by the temporary cessation in the operation of export-oriented capacities by the automotive industry, due to the disruption of global supply chains and the introduction of rigorous restrictive measures in the domestic economy and within EU countries, especially evident in the second quarter of the year. Already in the second half of the year, the total export activity registered relatively fast recovery, registering a small growth on an annual basis. Lower exports, reduced domestic demand, as well as the fall in energy prices due to the pandemic led to a decrease in the foreign trade's import component. Thus, the import of goods registered an annual fall of 10%, with a significant decrease in energy imports, more specifically of oil derivatives, as well as lower raw material imports by export-oriented facilities in the economy, which is noticeable through lower import of non-ferrous metals and machinery and transport devices. The significant contribution of the energy component in the decrease in imports is due simultaneously to lower import prices, as a result of the large decrease in stock prices, but also to the pronounced quantitative fall in imports of oil products, due to lower consumption caused by restrictions in international and domestic travel as a measure to prevent the spread of the virus.

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



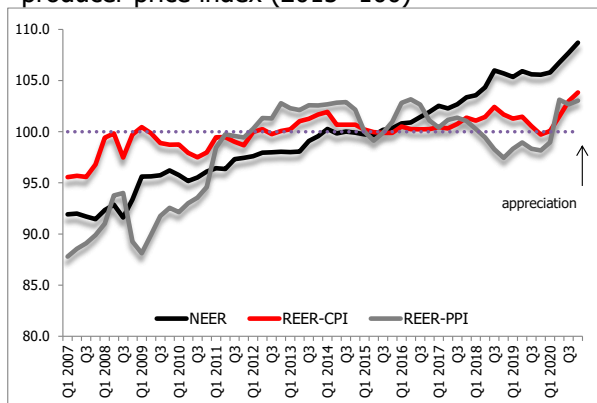
Source: State Statistical Office

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



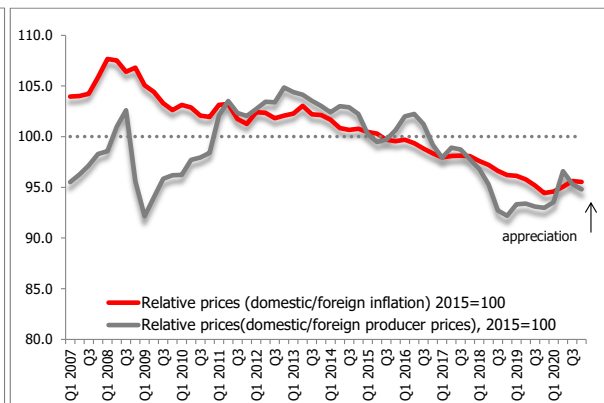
In terms of price competitiveness indicators of the domestic economy³⁷, in 2020 the real effective exchange rate deflated by the consumer prices appreciated by 1.3% on an annual basis, while the growth of the index calculated with the prices of industrial producers is more pronounced and equals 3.6%. The nominal effective exchange rate appreciated by 1.5% on annual basis, due to the further, but more pronounced depreciation of the Turkish lira against the denar. The relative consumer prices this year also decreased on an annual basis, but significantly more moderately (by only 0.2%). On the other hand, after the decrease in the previous three years, the relative prices of producers of industrial products in 2020 increased (by 2%), in conditions of further slight growth dynamics in domestic prices, and decrease in foreign prices.

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



Source: NBRNM.

Chart 39
Relative prices (2015=100)



Source: NBRNM.

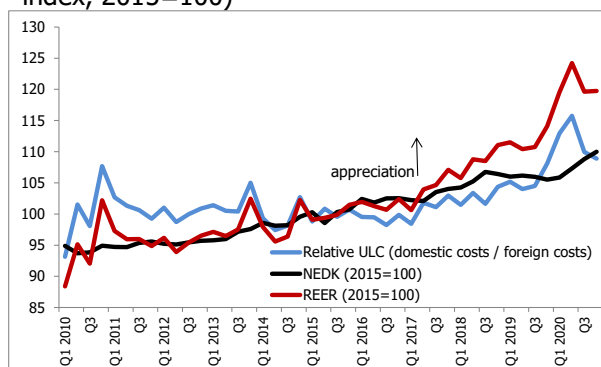
The REER indices calculated according to the unit labor costs³⁸ also indicate appreciation in 2020. More precisely, the REER index calculated with weights based on the

³⁷ 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.

³⁸ 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 for Russia and Serbia, where the calculated indices for Serbia refer only to the industrial sector.

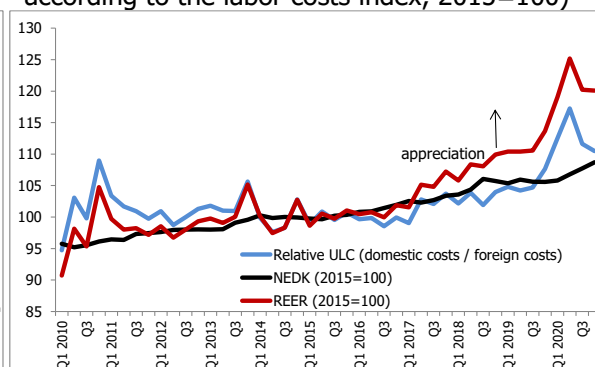
total foreign trade appreciated by 8.2%, given moderate appreciation of the NEER of 2% and more pronounced annual growth in relative labor costs of 6.1%. Annual appreciation of 2.5% was registered in the REER index calculated by using weights based on the foreign trade without primary commodities of 8.9%, as a result of the growth of the relative labor costs of 7.2%, as well as the annual appreciation of the NEER (of 1.5%).

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)



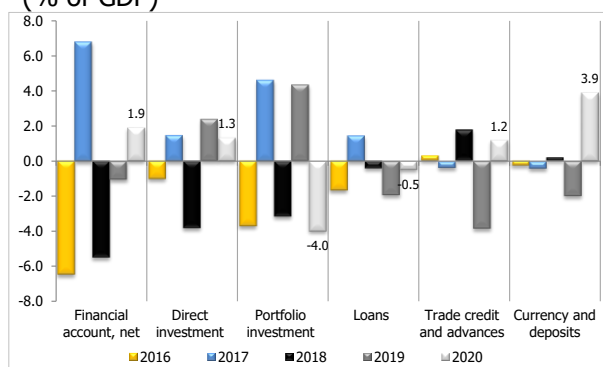
Source: NBRNM.

In 2020, the balance of payments' financial account registered net inflows of Euro 447.9 million, or 4.2% of GDP, which enabled full funding of the current account deficit, as well as an increase in foreign reserves. The favorable flows are a result of the realized net inflows in almost all financial account components, with the exception of the category of currencies and deposits, where the trend of realized net outflows continues. The positive financial flows arise mostly from the government borrowings abroad through issuance of new Eurobond on the international capital market³⁹ and in form of long-term borrowings from the international financial institutions⁴⁰. Additional net inflows were realized on the basis of long-term borrowing of the private sector and on the basis of trade credits. A significant source of inflows in the financial account were direct investments, which in 2020 amounted to Euro 205.7 million, or 1.9% of GDP, but lower than the performance in the previous year (3.2% of GDP). In terms of the structure of direct investments, they are almost entirely derived from net inflows based on intercompany debt and equity. The movements in currencies and deposits are entirely conditioned by the behavior of the other sectors in the economy (mainly the households), with a slight decrease in the banks' foreign currency assets on the accounts abroad.

³⁹ In May 2020, the Ministry of Finance issued the seventh Eurobond in the amount of Euro 700 million, with a maturity of 7 years and at an interest rate of 3.675%.

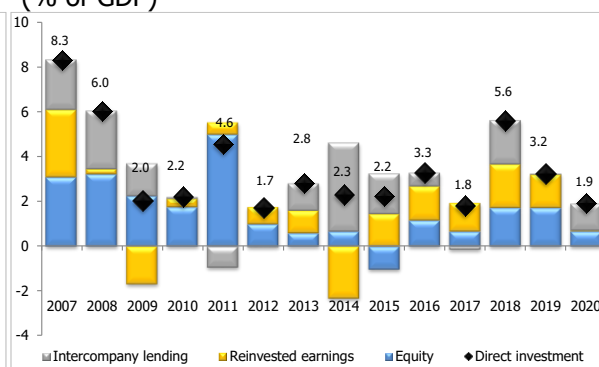
⁴⁰ In April 2020, the Ministry of Finance borrowed from the International Monetary Fund (IMF), withdrawing funds in the amount of Euro 176.8 million on the basis of the Rapid Financing Instrument, while in the last quarter funds were withdrawn from the European Commission in the amount of about Euro 80 million and from the World Bank in the amount of about Euro 32 million.

Chart 42
Financial account
(% of GDP)



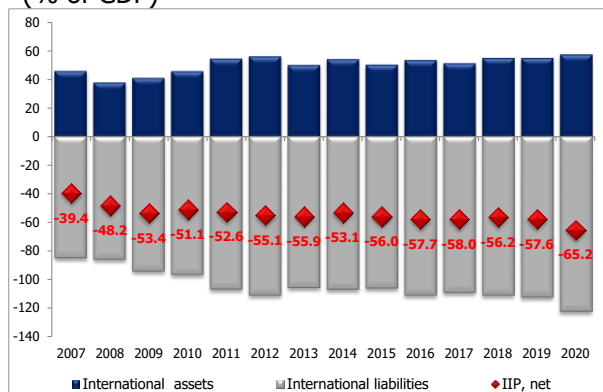
Source: NBRNM.

Chart 43
Direct investment
(% of GDP)



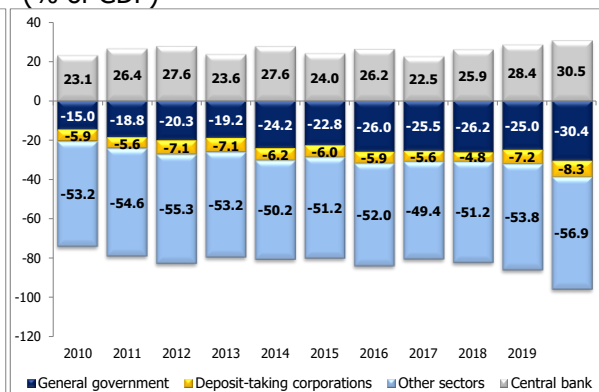
At the end of 2020, the net international investment position (IIP) of the Macedonian economy amounted to Euro 7,019.2 million or 65.2% of GDP. On an annual basis, it is higher by 7.6 percentage points of GDP, amid faster growth of international liabilities compared to the growth of international assets (by 10.0 and 2.4 percentage points of GDP, respectively). The sectoral analysis of the IIP shows that its increase is mostly due to the increased net liabilities of the government, i.e. higher net liabilities on portfolio investments and loans. Other sectors of the economy also reported increased net liabilities (mainly due to the higher net liabilities to direct investors), as well as deposit corporations (whose higher net liabilities mostly result from higher net liabilities on long-term loans). On the other hand, favorable developments were registered in the net position of the central bank, as a result of the increase in foreign reserves.

Chart 44
International Investment Position
(% of GDP)



Source: NBRNM.

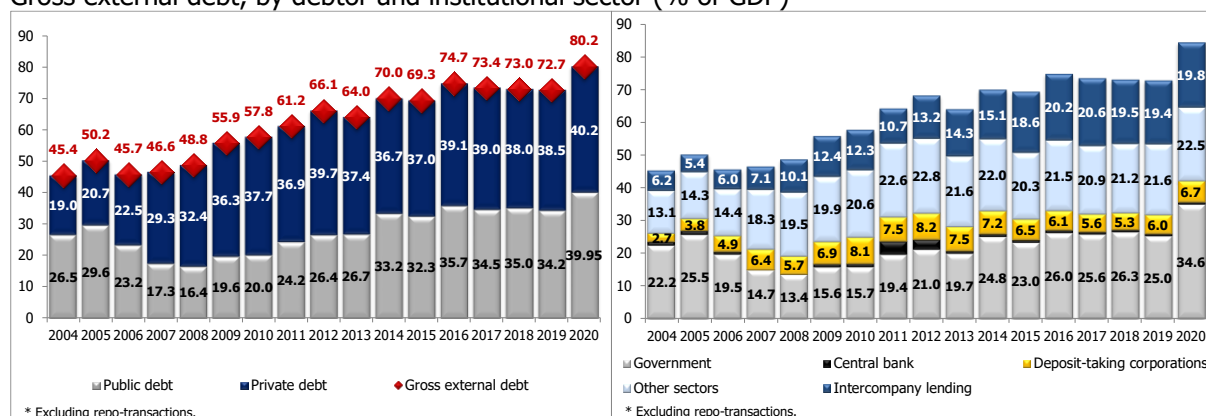
Chart 45
International investment position, by sector
(% of GDP)



At the end of 2020, the gross external debt stood at Euro 8,630.3 million or 80.2% of GDP, which is an annual increase of 7.4 percentage points of GDP. This shift mainly reflects the increased public debt of 5.7 percentage points of GDP, amid higher private debt of 1.7 percentage points of GDP. The public debt increased largely due to the higher central government debt (issuance of Eurobond, and borrowings from international financial institutions), and less to the higher debt of public banks. Moreover, the annual growth of private debt mainly stems from the higher debt based on long-term loans of the non-banking private sector and commercial banks, amid low growth of intercompany debt.

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. Dynamic analysis indicates improvement in liquidity ratios, with small upward shifts in almost all solvency ratios.

As of 31.12.2020, net external debt stood at Euro 3,391.5 million or 31.5% of GDP, which is an annual increase of 6.5 percentage points of GDP. Higher net external debt is due to higher public and private net debt (by 4.1 percentage points and 2.4 percentage points of GDP, respectively).

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	1.96	117.20	72.75	8.62	1.56	1.02	25.58
31.12.2020	2.11	137.92	80.16	15.14	1.85	1.08	21.03
<i>Moderate indebtedness criterion</i>	12 - 20%	165 - 275%	30 - 50%	18 - 30%	1.00		

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

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

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

Source: NBRM.

3.5. Monetary and credit aggregates⁴¹

3.5.1. Monetary aggregates

During 2020, the domestic economy faced an unexpected shock caused by the spread of COVID-19. In such circumstances, money supply and total financial sector⁴² deposits continue to grow, but at a more moderate pace compared to the previous year. The financial stimulus for the companies hit by the crisis and the disposable income of the households, as well as the measure for deferring loan repayments partially affected the dynamics of the money supply and deposits during the year, amid greater restraint from consumption and investments.

Chart 47
Broad money M4 and total deposits

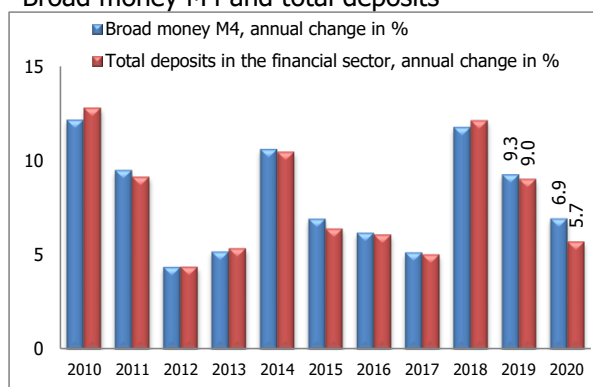
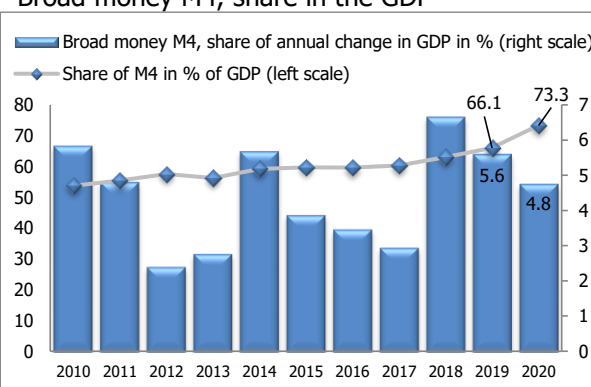


Chart 48
Broad money M4, share in the GDP



Source: NBRNM.

In 2020, broad money M4 grew by 6.9%, which is a moderate annual deceleration (last year: 9.3%). Structurally, amid increased uncertainty due to the pandemic and the preference for holding liquid assets, there is an increase in the most liquid components of M4 - cash in circulation and demand deposit. During the year, there was a significant acceleration of the annual growth of cash in circulation (from 12% in 2019 to 21% in 2020), amid increase in their share in M4 (from 7.9% in 2019 to 9% in 2020). From a maturity point of view, there was a decrease in long-term deposits, amid acceleration of the growth of short-term deposits. Given the decelerated monetary growth, the annual money supply growth to GDP ratio at the end of the year equaled 4.7% and decreased compared to last year (5.6%). On the other hand, due to the markedly adverse effect on economic activity, money supply to GDP continued to grow and amounted to 73.3% at the end of the year, compared to 66.1% in the previous year.

⁴¹ Data on total deposits and loans from August 2020 onwards do not include data on a bank whose founding and operating license was revoked and who went into bankruptcy in August 2020. For closer understanding of the banking system flows without the effect of this change in the monetary statistics chart, total deposit and credit flows in 2020 were adjusted with data for the respective bank. The adjustment in total deposits was made by including the amount of deposits that is not subject to compensation by the Deposit Insurance Fund in the current balance of total deposits, while the adjustment of total loans was made by including the July data on the balance of bank's loans in the current balance of total loans.

⁴² 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 made by the the National Bank in June 2018. For more information on the methodological changes visit: http://www.nbrm.mk/monetarna_statistika_i_statistika_na_kamatni_stapki.nspix.

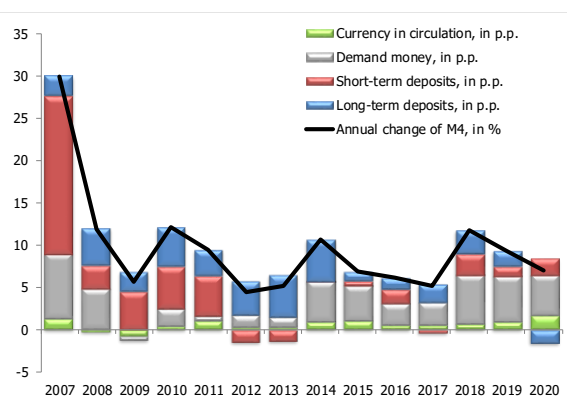
Table 2
Money supply components - balance and changes

	Balance as of				Annual change			
	2017	2018	2019	2020	2017	2018	2019	2020
	in millions of denars				in %			
Currency in circulation	29,968	32,233	36,108	43,696	6.3	7.6	12.0	21.0
Demand money	96,288	117,616	139,580	160,765	11.1	22.1	18.7	15.2
M1	126,256	149,849	175,688	204,461	9.9	18.7	17.2	16.4
Short term denar deposits up to 1 year	47,834	49,487	49,042	44,042	-6.4	3.5	-0.9	-10.2
Short term foreign currency up to 1 year	106,566	114,501	120,160	134,950	2.1	7.4	4.9	12.3
M2	280,656	313,837	344,889	383,453	3.8	11.8	9.9	11.2
Long term denar deposits over 1 to 2 years	37,407	38,132	36,845	30,665	6.5	1.9	-3.4	-16.8
Long term foreign currency over 1 to 2 years	18,926	21,466	22,294	22,108	12.6	13.4	3.9	-0.8
M3	336,989	373,436	404,028	436,226	4.6	10.8	8.2	8.0
Long term denar deposits over 2 years	22,647	29,369	35,767	34,667	12.5	29.7	21.8	-3.1
Long term foreign currency over 2 years	13,295	14,010	15,616	16,092	7.3	5.4	11.5	3.0
Total deposits*	246,675	266,965	279,723	282,523	2.8	8.2	4.8	1.0
Total	342,963	384,581	419,303	443,288	5.0	12.1	9.0	5.7
M4	372,931	416,814	455,411	486,984	5.1	11.8	9.3	6.9

*without demand deposits.

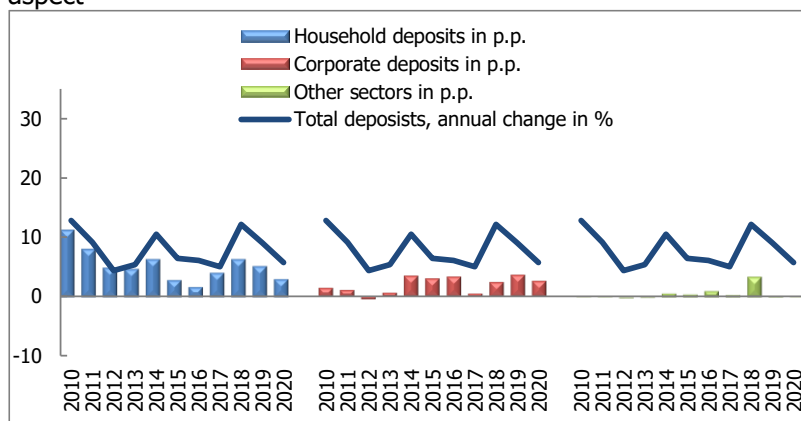
Source: NBRNM.

Chart 49
Money supply, annual change and structure



In 2020, total financial sector deposits registered an increase of 5.7%⁴³, weaker though compared to the previous year (9.0%). Analyzed by sector, this year, household deposits were generator of the growth along with the corporate deposits. Analyzed by currency and maturity, there was a change, compared to the previous year, namely an increase in the contribution of foreign currency deposits and short-term deposits. However, denar deposits continue to grow (entirely as a result of demand deposits), significantly weaker though compared to the period before.

Chart 50
Total deposits (with demand deposits), annual change and contribution to the change from sectoral aspect



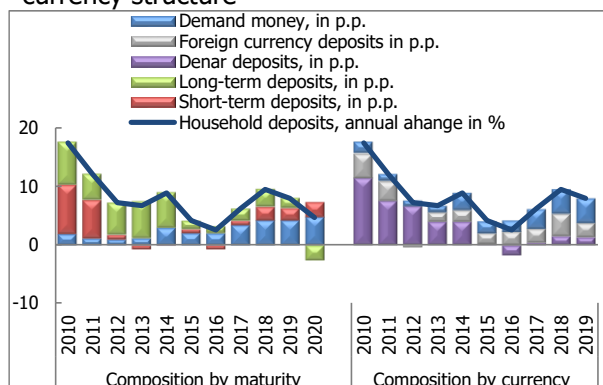
Source: NBRNM.

Household deposits⁴⁴ registered an annual growth of 4.6% in 2020 (7.9% in 2019). Analyzed by maturity and currency structure, the growth this year also largely stems from the increase in demand deposits. The growth of short-term savings also continues, amid decrease in long-term deposits. During the year, households opted for foreign currency savings, unlike the previous year when denar deposits prevailed (including deposit money).

⁴³ If we include the data from the bank in bankruptcy, the deposit growth in 2020 would be 6.3%.

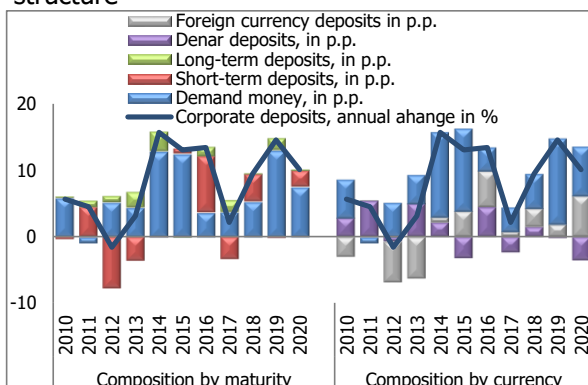
⁴⁴ Deposit data also include demand deposits.

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 2020, corporate deposits increased by 10.1% (14.6% in 2019). Demand deposits were the major generator of growth, amid increase in both short-term and long-term deposits. Analyzing by currency, foreign currency deposits contribute to most of the growth of total corporate deposits, with significantly lower positive contribution of denar deposits (including demand deposits) compared to the previous year.

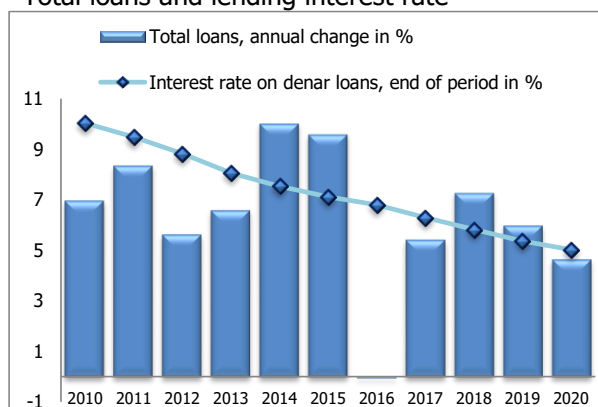
Taking into account such performance, in 2020, the degree of euroization, measured as a ratio between deposits with FX component and total deposits of the banking system, moderately increased to 39.8% (38.5% in the previous year). In household deposits, the share of deposits with foreign currency component reached 47.1% (46.4% in the previous year). However, the increase in the household preference to save in foreign currency is more moderate if we compare it with the 2009 GFC, when the share of foreign currency deposits in total household deposits increased by 6.5 percentage points, to 65.3%, compared to 2008.

3.5.2. Lending activity

The solid credit support of the banking sector to the domestic economy continued in 2020, moderately though compared to the previous year. Total loans in 2020 registered an annual growth of 4.7%⁴⁵, which was more moderate compared to last year (6.0%). Given the adverse pandemic consequences, since the outbreak of the pandemic, the National Bank cut the policy rate and adopted a series of measures to ease credit standards and to inject additional liquidity in the banking system, to stimulate lending. Annual growth of total loans to GDP ratio at the end of 2020 was 2.4 percentage points, compared to 2.8 percentage points in 2019, while loan to GDP ratio increased to 53.8% due to the economic contraction (previous year: 48.8%).

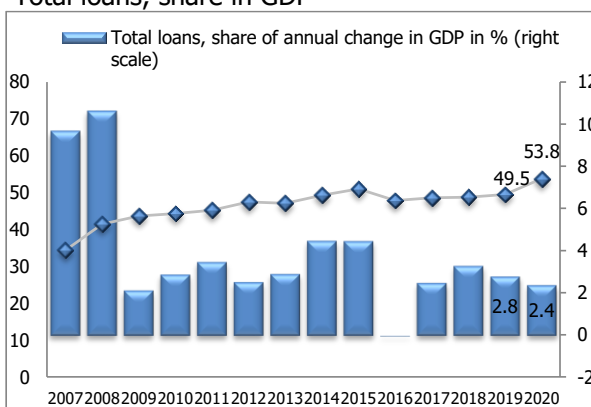
⁴⁵ Including the stock of approved loans by the bank in bankruptcy, the credit growth in 2020 is 6.4%.

Chart 53
Total loans and lending interest rate



Source: NBRNM.

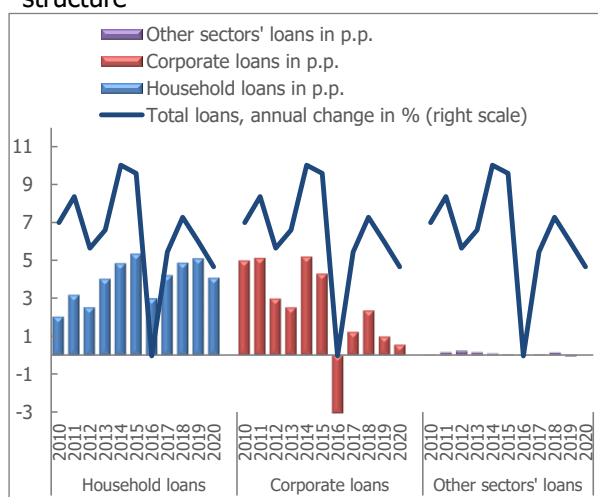
Chart 54
Total loans, share in GDP



Such shifts in lending partly correspond to the banks' perceptions of increased risks, amid uncertain macroeconomic environment as a result of the health crisis. Namely, according to the lending surveys of the National Bank, in 2020 there was a net decrease in the demand for loans by households and companies, with further net easing of credit standards for both sectors. Analyzing risks, there was an increase in the risk perceptions by companies, analyzed through the banks' expectations for the total economic activity⁴⁶.

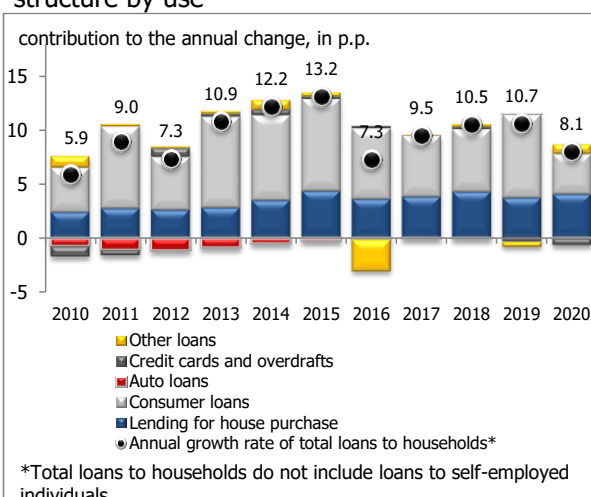
Loans granted to the household sector continue to be the main driver of the annual growth of total loans, with smaller positive contribution of the corporate lending. Regarding lending to households, the analysis by loan type point to housing loans as drivers of growth, with slower growth of consumer loans. From currency and maturity aspect, the annual growth of total loans largely results from denar loans and long-term loans.

Chart 55
Total loans, annual growth and sectoral structure



Source: NBRNM.

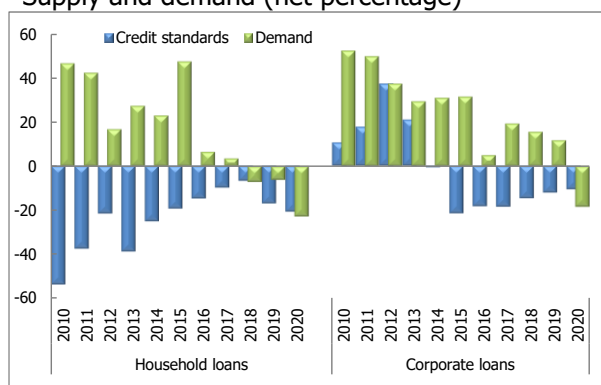
Chart 56
Total household loans, annual growth and structure by use



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

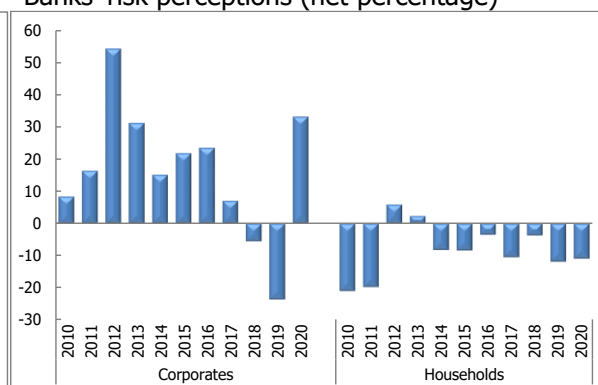
⁴⁶ About one third of the surveyed banks estimated that the expectation factor for the total economic activity contributes to net tightening of credit standards for companies.

Chart 57
Supply and demand (net percentage)*



*In terms of credit standards, negative net percent means easing of 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)*



*In households, an average is presented of the net percentage of the risk factors influencing the lending terms when extending housing and consumer loans.

IV. Macroeconomic environment and monetary policy in 2021 - 2023⁴⁷

The macroeconomic forecasts of the National Bank from October 2020 showed that the COVID-19 pandemic and the containment measures in 2020 had a strong negative impact on both the global and domestic economies. The rapid, timely and coordinated reaction of monetary and fiscal policy in response to the global crisis has mitigated the initial blow to the real sector. Amid protracted pandemic, resurgence of infection rates and virus mutations, the policies were adjustable by the end of the year with expectations to remain as such for a longer period, i.e. until sustainable recovery of the real sector from the crisis.

The National Bank, pursuing an adjustable monetary policy during 2020, sought to mitigate the adverse effects of the COVID-19 pandemic on the domestic economy, amid a solid level of foreign reserves and absence of inflationary pressures. The monetary easing has supported credit flows in the economy and increased liquidity in the banking system. Also, the changes in the banking regulations provided greater flexibility of the banks and maintenance of the credit cycle.

The National Bank's monetary policy will continue maintaining price stability as a primary monetary objective defined by law. In the period ahead, the National Bank will seek to maintain 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 will keep on applying the 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 entities arises from the specifics of the domestic economy, as small, open and highly import-dependent. 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.

According to the National Bank's October 2020 forecasts, the monetary policy in the period 2021-2023 will be conducted in highly uncertain circumstances. The consequences of the crisis will be felt in 2021, while full recovery and compensation of economic losses is expected in 2022. Greater success in the field of corona-virus vaccines and treatments, as well as additional incentives from policy makers, could improve the outlook for economic recovery. Namely, if the vaccines are effective against the new mutations, the world could come out of the crisis with less than currently estimated consequences. On the other hand, the slow immunization process, the lower efficacy of vaccines against virus mutations, the possible premature withdrawal of the support from policy makers, as well as the possible tightening of financial conditions, could seriously slow down economic recovery.

Regarding the Macedonian economy, in 2021 and 2022, the economic growth rates are expected to reach 3.9% and 3.6%, respectively. Economic recovery for 2021-2022 will be supported by domestic demand, amid labor market stabilization, continuity of credit flows, increased confidence, and recovery of private consumption, especially investment. Exports are also expected to stimulate growth, which is recovering relatively quickly, supported by

⁴⁷ This section gives a review of the macroeconomic forecasts of the National Bank from October 2020.

normalization of global production chains, by foreign demand recovery in the coming period. In 2023, the real growth rate of the domestic economy is expected to be 4%.

Regarding the future price trajectory in the domestic economy, there are expectations for maintaining the environment of stable prices, without major inflationary pressures. According to the October forecasts for 2021, the inflation rate is expected to accelerate moderately and reach 1.5%, having in mind that the current developments indicate upward risks. The October forecasts expect the inflation to come close to about 2% in 2022-2023, amid gradual demand recovery and moderate import price growth. High uncertainty about the future dynamics of stock prices of primary commodities remains a major risk factor to the forecast. However, the assessments of prices of primary commodities are extremely volatile and are currently under the strong influence of the pandemic, which creates greater uncertainty about their future dynamics in both short and longer terms.

Notwithstanding the pandemic shock, the external position of the economy is still stable. For the period ahead, trade deficit is expected to narrow, given the exports recovery, as well as the greater import pressures amid economic intensification. On the other hand, the normalization of the pandemic would lead to a gradual increase in remittances. In such circumstances, the current account deficit would remain moderate at 2.6% of GDP in 2021 and would decrease to 1.6% of GDP, on average, in the period ahead. In terms of financing, there are assumptions about unimpeded access to international financial markets and expectations for additional external public and private borrowing, as well as inflow of foreign investment. Over the forecast horizon, foreign reserves increased, with adequacy indicators being in the safe zone.

Credit activity of the banking system will remain a great supporter of economic growth, underpinned by the National Bank measures taken at the beginning of the crisis aimed at easing monetary policy and enabling regulatory flexibility. With gradual normalization of the situation and stabilization of expectations, lending is expected to gradually accelerate in the coming period. Thus credit growth would average 6.3% in the period 2021-2022 and would reach 7.6% in 2023. The estimates for such loan and deposit growth are based on the expectations for stabilization of the domestic economy by the end of 2021. In 2021-2022, amid assessments for economic acceleration and maintenance of high propensity to save in banks, the annual deposit growth is expected to average about 6.9%. Deposit growth of 8.2% is expected for 2023.

In the fiscal area, there are expectations for gradual budget consolidation in the medium term. Budget deficit would be financed from both domestic and external sources. The fiscal policy setup is accompanied by risks, which, as in the monetary policy, arise from the pandemic management prospects both in domestic and global terms.

The National Bank will continue to monitor the current domestic and foreign movements and risks, and accordingly, will evaluate and accommodate the monetary policy setup.

V. Monetary instruments

The changed environment caused by the COVID-19 pandemic in 2020 required a rapid and relatively strong response of the National Bank through monetary instruments for the purposes of increasing access to liquid assets and mitigating any adverse economic consequences. Thus due to increased liquidity support of the banking system, expansion of investment opportunities of banks and support of real flows in the economy, the National Bank released part of the excess liquid assets of banks twice by reducing the amount of the underlying instrument by a total of Denar 15 billion, while reducing the key interest rate to the record low of 1.5%. The real economy was supported by the reintroduction of the non-standard reserve requirement measure, providing targeted credit support to the most affected sectors. To further strengthen the solid liquidity position of the banking system, the National Bank expanded the scope of instruments that banks could use in providing denar liquidity from the National Bank.

At the beginning of the year, the National Bank eased its monetary policy by cutting the policy rate by 0.25 percentage points to 2.0%. This decision was made in the absence of external pressures, favorable developments in the foreign exchange market and continuous increase in foreign reserves. Shortly after, in early March, the unexpectedly strong spread of COVID-19 and the introduction of containment measures to protect public health globally caused uncertainty among the country's economic entities. The first signals of the specificity of the crisis and the unfavorable expectations were seen through the extreme growth of cash in circulation⁴⁸ amid strong public preference to purchase goods for private consumption and to hold a larger amount of denar cash. The specificity of the crisis and its effects were also confirmed through the foreign exchange market movements, where net sales of foreign currency by the banks for their clients intensified (annex on the foreign exchange market). The changes in this market segment stemmed mainly from the household sector, which due to the pronounced uncertainty and global measures to restrict movement, reported reduced inflows and thus lower supply of foreign currency in the foreign exchange market. Such unusual developments in the foreign exchange market, which were particularly pronounced at the beginning of the crisis, required from the National Bank to establish stronger communication with the public, but also to intervene by selling foreign currency liquidity to domestic banks. The National Bank interventions in the foreign exchange market were stronger in the first half of the year (Euro 313.9 million compared to the half of this amount in the second half of the year) and contributed to further maintaining of denar exchange rate stability.

Given that the pressure on the foreign exchange market arose from the supply of foreign currency, the National Bank at the very beginning of the crisis reacted quickly, applying relatively strong monetary easing through a set of monetary instruments. Thus, amid expectations of extremely unfavorable pandemic implications and in order to ease the conditions for real sector financing, in March and May, the key interest rate was reduced by additional 0.50 percentage points, to a historically lowest level of 1, 5%⁴⁹. In April and May, the National Bank reduced the amount of CB bills⁵⁰ by a total of Denar 15 billion, to Denar 10

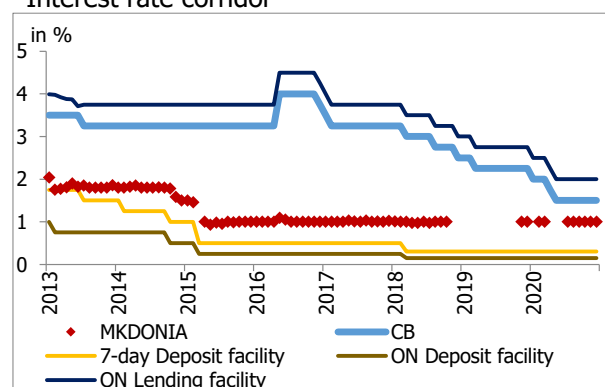
⁴⁸ In March and April, the balance of cash in circulation increased by Denar 5.6 billion, accounting for 84% of the annual growth of denar cash for the whole of 2020 (Denar 6.7 billion), which was also a record high.

⁴⁹ Consequently, lower interest rates were applied to both liquidity repo auctions and overnight loan facilities, whose interest rate is equal to or by 0.5 percentage points exceeds the CB bills interest rate, respectively.

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

billion. By reducing the supply of CB bills, the National Bank released 60% of the liquid assets of the banking system absorbed through this instrument and created room for higher lending to the domestic economy. The National Bank's anti-crisis measures aimed at providing banks a faster access to liquidity for financial support of the real sector included 1) reinforcement of the non-standard reserve requirement measure, which provides targeted support for easing the credit conditions, this time to the sectors that were most affected by the pandemic; 2) expansion of the portfolio of acceptable securities for providing liquidity for the domestic banks from the National Bank, by including domestic government bonds with the longest maturity and the Eurobonds issued by the government on the international financial markets. The ECB also established a repo line for the National Bank to provide foreign currency liquidity in the amount of Euro 400 million. This line is available until March 2022 and creates additional space for fast and efficient action of the National Bank if there is a need to provide euro liquidity for the banks in the country.

Chart 59
Interest rate corridor



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

Chart 60
CB bills and banks' excess liquidity⁵¹

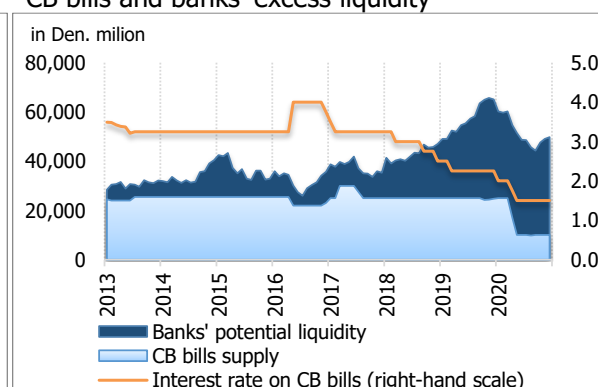
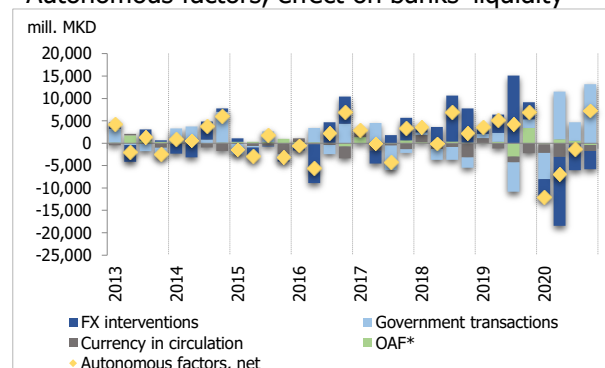
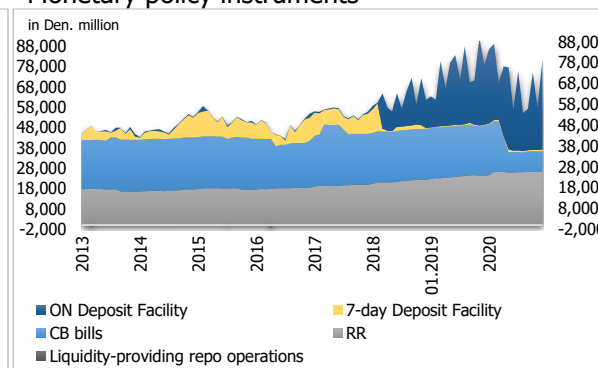


Chart 61
Autonomous factors, effect on banks' liquidity



* OAF – other autonomous factors
Source: NBRNM.

Chart 62
Monetary policy instruments



In the first half of the year, banks used the released liquidity through CB bills to bridge the time mismatch between the reduced liquidity potential early in the crisis on the one hand, and the fiscal anti-crisis measures in May and June, which contributed to increasing excess denar funds of the banking system, on the other hand. The National Bank deposit facilities

⁵¹ Banks' excess 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.

also ensured high flexibility in the management of liquidity changes⁵². Similar to previous years, in 2020, banks actively used overnight deposit facilities, whose average balance since April, immediately after the introduction of the National Bank measures, remained relatively stable (around Denar 31 billion). Just because of the high amount of free funds directed to this instrument, the banks did not need to provide funds from the National Bank through overnight loans and repo auctions to create liquidity, which are conducted every Friday. Also, the solid liquidity position ensured that banks have only occasional and small need to borrow on the interbank unsecured deposit market (box addressing movements on the interbank unsecured deposit market and the secondary securities market).

At the beginning of the second half of the year, the gradual easing of containment measures to prevent the spread of COVID-19 and the normalization of business processes around the world had a positive effect on the domestic environment. The first signs of improved movements were again seen in the foreign exchange market through increased foreign exchange inflows of private transfers and reduced household preference for foreign currency. These circumstances provided the natural persons to constantly increase the net supply of foreign currency on the foreign exchange and currency exchange market in the second half of the year (by about 73% improvement compared to the first six months of the year). This gradually reduced pressures on the foreign exchange market. Due to these developments, from July to the end of the year, the National Bank only occasionally and with half of the amount (Euro 158.6 million) participated in the foreign exchange market by compensating the occasional foreign exchange liquidity needs of the banks. Amid improved foreign exchange market developments and further stabilization of the foreign exchange liquidity of the banks, the National Bank in August reintroduced the foreign currency deposit auctions. Given the changing and uncertain movements in the international financial markets, this instrument offers banks opportunity for risk-free euro placements with the National Bank with a maturity of 1 and 3 months⁵³. At the same time, constantly maintaining both foreign exchange and denar liquidity of the banking system at an appropriate level, the National Bank did not need to use the ECB repo line.

In the second half of the year, the demand for denar cash stabilized. The budget measures for revitalization of the real economy continued, which increased banks' liquid assets in domestic currency. Despite the constant growth of banks' available funds in denars, in the remaining part of the year the National Bank kept the amount of CB bills at Denar 10 billion. This created space for using the excess denar funds for further support of the credit activity. After satisfying real sector demands, banks continued to place excess liquidity in overnight deposit facilities with the National Bank. Hence, the average balance of this instrument gradually grew reaching about Denar 34.4 billion at the end of the year, exceeding the pre-crisis level by about Denar 31.3 billion⁵⁴.

Box 1. Foreign exchange market developments⁵⁵ and National Bank Interventions

The foreign exchange market of the banks with their clients⁵⁶ was one of the first points hit by the health crisis in the domestic economy. This market, which is usually highly sensitive in times of crisis, in 2020 had unusual trends that confirmed the special, non-economic nature of the crisis. The crisis specifics were primarily perceived through the significantly reduced supply of foreign currency by natural persons, in the foreign exchange and the currency exchange market. Such natural persons'

⁵² In 2020, interest rates on overnight and seven-day deposit facilities remained at 0.15% and 0.30%, respectively.

⁵³ During the year, the banks showed a moderate interest to invest in this National Bank instrument.

⁵⁴ Placements in seven-day deposit facilities with the National Bank during the year were relatively low and stable, averaging around Denar 820 million.

⁵⁵ The foreign exchange market within this analysis encompasses the transactions between the banks and their clients and interbank trading.

⁵⁶ Bank customers are classified in the following four groups: businesses, exchange offices, households, non-residents.

behavior is opposite of the past crisis periods when the first signals of uncertainty and shift in the households' sentiment were seen through increased and usually short-term demand for foreign currency. **The lower foreign cash supply by natural persons was more pronounced in the foreign exchange market, more precisely in the transactions with the exchange offices, which further affected the inflow of foreign currency in the banking system.** The downward movement of the net purchased cash on the foreign exchange market mainly relates to the containment measures to prevent the virus spread, which reduced the international movement of passengers and accordingly contributed to a larger downward correction in foreign exchange inflows through informal remittances. Such shifts, in the absence of pressures on the demand side, contributed to a significant reduction (by Euro 444.1 million, on an annual basis) of the excess foreign currencies offered by the exchange offices to domestic banks. The specificity of the crisis is seen through the permanently lower supply of foreign currency by exchange offices to banks. Namely, since the beginning of the crisis until the end of the first half of the year, as a result of the global measures to restrict the movement of people, the supply of foreign currency from exchange offices (resulting from transactions in foreign assets of natural persons) was lower by about 50% on an annual basis. In the second half of the year, with the gradual opening of the borders, there was a trend of gradual increase in supply, which improved the foreign exchange potential of the banks.

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

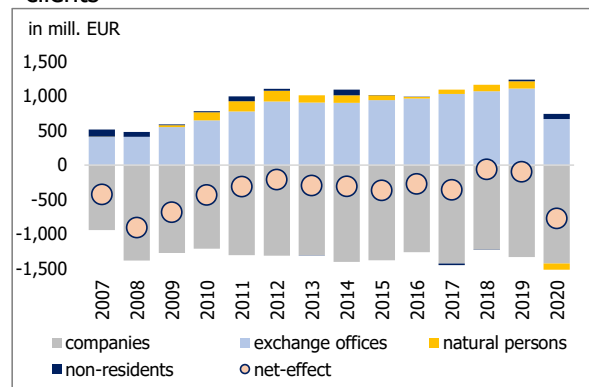


Chart 64
Annual change in the supply of and demand for foreign currency, by client

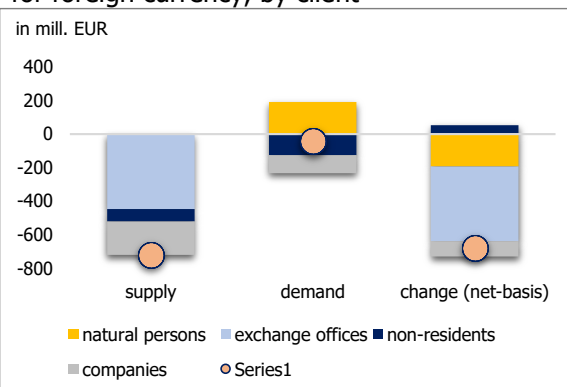


Chart 65
Banks' purchase of foreign currency from exchange offices, by quarter

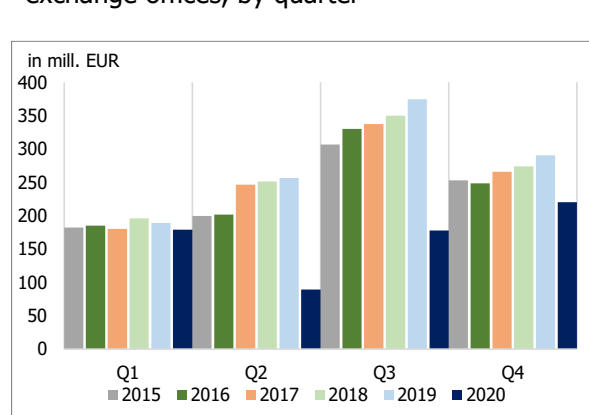
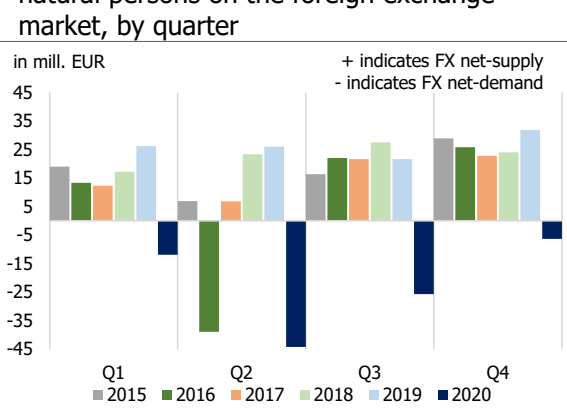


Chart 66
Net-supply of/demand for foreign currency by natural persons on the foreign exchange market, by quarter



Source: NBRNM

In 2020, natural persons demonstrated atypical behavior in the foreign exchange market as well, although with significantly weaker effects compared to the foreign exchange market. Namely, due to the crisis-related uncertainty, in 2020, the banks for the first time sold foreign currency (Euro 89 million) to natural persons. This unfavorable position of the banks in relation to the natural persons resulted from the stronger growth of the demand for foreign currency liquidity, although there was

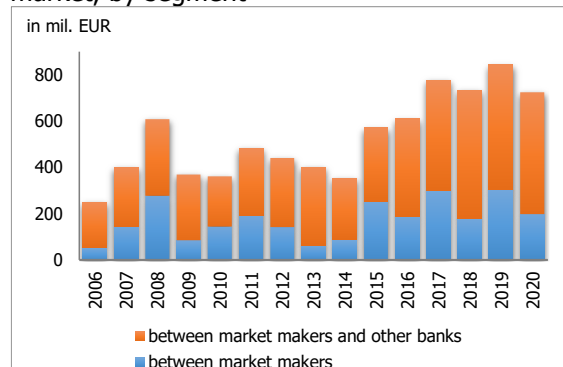
only a moderate slowdown on the supply side of foreign currency. Dynamically, the net sales for natural persons were pronounced in the first two months of the crisis, when about 60% of the annual net sales of foreign currency with these clients were conducted, and by the end of the year, the net needs of natural persons for foreign currency liquidity decreased, signaling a gradual normalization of flows.

The health crisis also affected the supply and demand flows of foreign currency by the corporate sector. Namely, although the net sale of foreign currency for the needs of the corporate sector (Euro 1,428 million) was moderately higher on an annual basis (by Euro 92 million), since the very beginning of the crisis, there was a decline in demand and supply of foreign currency by companies as a result of the economic contraction. The reduced need for foreign currency liquidity by the corporate sector mainly arose from the fuel production and trade companies, given the favorable effect of the lower price of imported quantities of this fuel during the entire crisis period. The health nature of the crisis was also seen in the increased demand for foreign currency by pharmaceutical and chemical companies, as well as IT trading companies, but their effect was far weaker compared to the lower demand for foreign currency by oil companies. The closure of the global and domestic economies tightened both trade and production chains that reduced foreign exchange inflow to the economy from export companies of almost all industries. Consequently, these changes contributed to a weaker supply of foreign currency liquidity by all companies, with the exception of IT service companies in the metal industry. Among banks' clients, only non-residents made a moderately higher annual net supply of foreign currency liquidity (by Euro 52 million compared to the previous year) of Euro 74 million. The better position of the banks with these clients, in addition to the one-time effects in the previous year, mainly reflects the lower dividend payments from the domestic financial sector to foreign shareholders.

As a result, in 2020, banks sold foreign currency for the needs of their customers in the amount of Euro 776 million, which is the highest level in the last twelve years⁵⁷. Given that the pressure from the non-economic shock on the foreign exchange market peaked up in June, banks secured some of the required foreign currency liquid assets from their own sources, but also on the interbank foreign exchange market (turnover of Euro 858 million), where higher demand for foreign currency prevailed. The higher demand, which was partly due to the active banks' management of their foreign exchange liquidity in the international financial markets, was offset by the National Bank. In the first six months, the National Bank sold Euro 313.9 million. In addition to the interventions in the spot segment, the National Bank often acted through enhanced communication in order to normalize the expectations of domestic entities and defend the denar exchange rate against the euro. The signals for gradual stabilization of the movements and restoration of the confidence of the economic agents in the second half of the year were also noticed on the interbank foreign exchange market, through the reduced banks' need to compensate for the short-term mismatch of inflows and outflows of foreign exchange liquidity from customers. In such circumstances, in the second half of the year, the National Bank was present less and occasionally, by selling almost twice lower amount of foreign currency (Euro 158.6 million) to the banks. At the end of December, amid improved market trends and further improvement of the banks' foreign exchange liquidity, the National Bank made a small purchase for the first time in the year. The National Bank's comfort space for permanent presence on the foreign exchange market by net sales of Euro 470.5 million in 2020 was supported by the solid level of foreign reserves, which in the past four years were constantly replenished by absorbing excess foreign currency liquidity from the banking system.

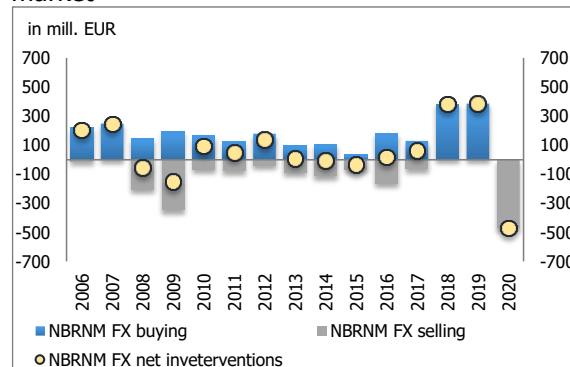
⁵⁷ For comparison, in the previous two years, customers had a moderate net demand for foreign currency (around Euro 85 million on average), which was compensated by banks.

Chart 67
Turnover on the interbank foreign exchange market, by segment



Source: NBRNM

Chart 68
NBRNM interventions on the foreign exchange market

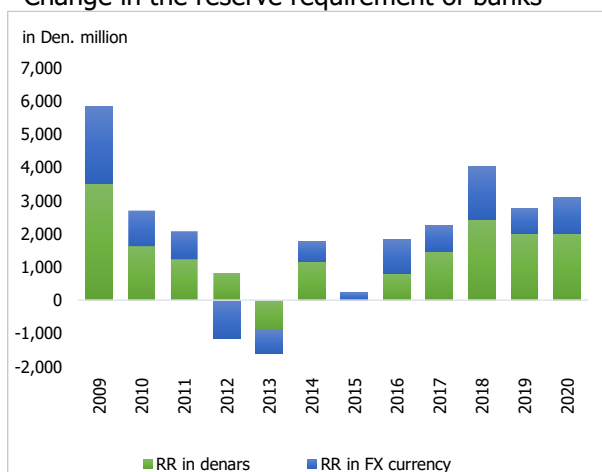


In 2020, the reserve requirement was used to manage banks' liquidity. Besides the basic function of this instrument, the National Bank reintroduced the non-standard measure in order to act as an incentive for continued credit support to companies from the most vulnerable industries. The measure reduces the banks' reserve requirement base in denars for the amount of newly approved and restructured loans approved to businesses in sectors that are most affected by the health crisis. Since its introduction until the end of 2020, the measure covered 1,504 companies that used loans in the total amount of Denar 6,953 million. Most of these loans (about 46%) are granted to freight and road transport companies followed by hotels and restaurants, which have equal representation (19% each). Such lending activity to the target sectors reduced the banks' liability for allocation of reserve requirement with the National Bank by Denar 532 million. The net liquidity effect from the non-standard measure⁵⁸, together with the changes in banks' denar and foreign currency liabilities⁵⁹ contributed to a relatively high annual growth of the banks' liability reserve requirement, by a total of Denar 3,220 million. Most of this change reflects the stable annual growth of the reserve requirement in denars (from Denar 2,019 million to Denar 26,272 million).

⁵⁸ At the end of December 2019, the non-standard measure for stimulating credit activity of systemically important sectors (net exporters and domestic electricity producers) was revoked. As a result, in January 2020, the banks' liability for allocation of reserve requirement in denars increased by Denar 1,079 million.

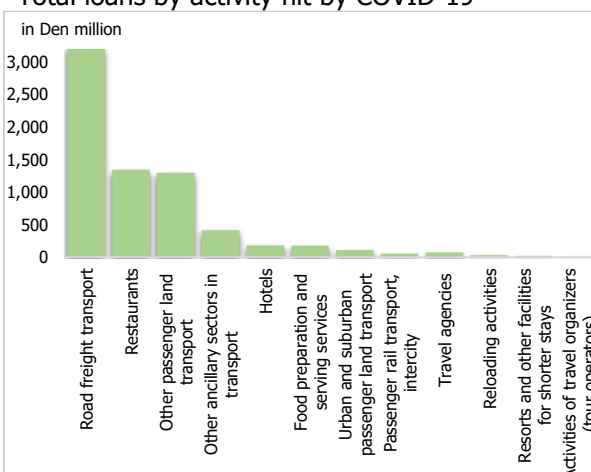
⁵⁹ In 2020, the National Bank did not make any changes in the reserve requirement rates and base. Reserve requirement rate of 8% is applied to banks' denar liabilities, 15% to banks' foreign currency liabilities, and 50% for banks' liabilities in denars with currency clause.

Chart 69
Change in the reserve requirement of banks



Source: NBRNM

Chart 70
Total loans by activity hit by COVID-19

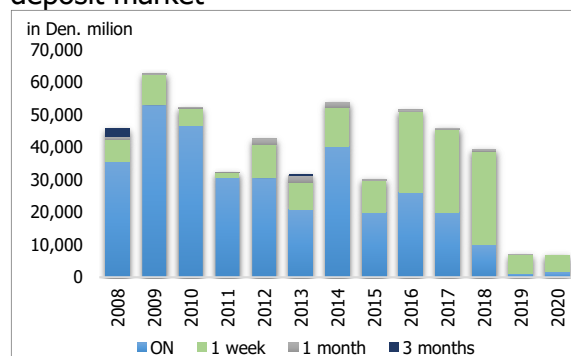


Besides, the banks' reserve requirement in euros registered a significant annual growth (by equivalent of Denar 1,201 million), reaching Denar 18,294 million at the end of the year. Such changes in reserve requirement from currency point of view arise from the relatively stronger growth of foreign currency compared to the solid growth of banks' denar liabilities (for more details on the changes in the banks' deposit base see the Monetary Aggregates section).

Box 2. Developments on the interbank market for uncollateralized deposits and the secondary securities market⁶⁰

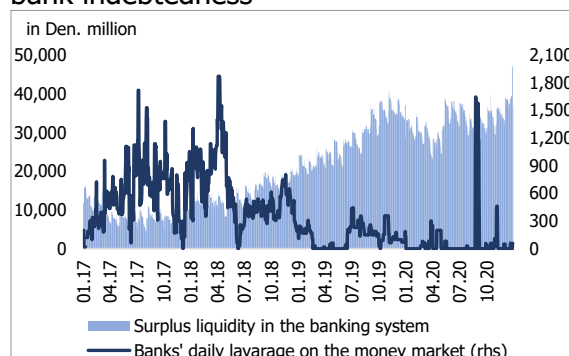
In 2020, due to the high amount of available denar funds, banks had a very small and occasional need to borrow in the domestic financial markets, despite the large liquidity changes. Consequently, on the interbank uncollateralized deposit market, for the second year in a row, there was a relatively low trade activity of Denar 6.65 billion, which was less by 84% compared to the average bank's need to offset their short-term needs for denar liquidity in 2008-2018.

Chart 71
Turnover on the interbank uncollateralized deposit market



Source: NBRNM

Chart 72
Excess liquidity in the banking system and bank indebtedness



The weak demand for banks' liquid assets also affected their average daily debt (around Denar 65 million), which in 2020 was almost halved on an annual basis. The maturity structure of trading

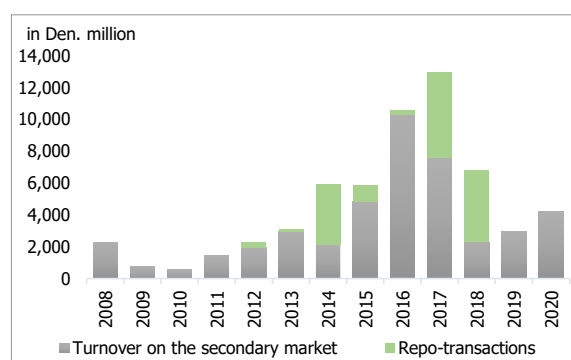
⁶⁰ Money market analysis in North Macedonia includes uncollateralized deposit market, secondary market of short-term securities and long-term government securities (excluding structural bonds), secured deposits market (repo market).

additionally reduced the need for borrowing. Namely, for the third year in a row, the banks provided most of the required funds (78%) with maturity up to one week, which reduces the need for more frequent trading in shorter maturities. In such circumstances, overnight loans were less used.

The interest rates on interbank uncollateralized deposit market in 2020 remained stable. The average interbank interest rate on all transactions (MBKS) at the end of the year was 1.1% and was lower by only 0.03 percentage points compared to December 2019. The most common one-week interbank uncollateralized loans had a relatively stable interest rate (average of 1.13%), with an unchanged level (around 1%) of the interest rate on uncollateralized overnight deposits, which were traded occasionally. The interbank interest rate on overnight transactions (MKDONIA) was also maintained at this level.

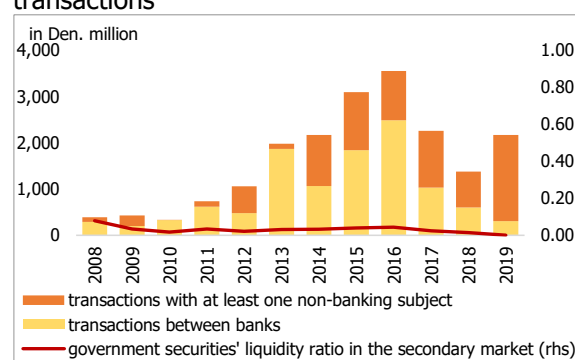
In 2020, Denar 4,190 million of securities were traded on the secondary market which is by 40% more compared to the previous year. Analyzing by type of transactions, the higher trade activity was entirely due to the outright securities transactions, given that for the second year in a row, amid solid banks' liquidity position, the interbank repo market segment registered no activity. In 2020, banks concluded only one transaction for purchase and sale of CB bills of merely Denar 100 million, and the turnover was dominated by trading in government securities in the amount of Denar 4,090 million (or 97.6% of the total turnover). The trading mainly included government securities with a maturity up to one year (Denar 3,381 million). In all treasury bills transactions in 2020, at least one participant was a non-banking entity, indicating that market participants occasionally use these transactions to manage the liquidity needs arising from their everyday operations. However, notwithstanding the annual increase in the volume of traded government securities on the secondary market, its share in the total amount of government securities issued in the country was very low (0.01%), indicating further 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 transactions⁶¹



⁶¹ The liquidity ratio of government securities 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.

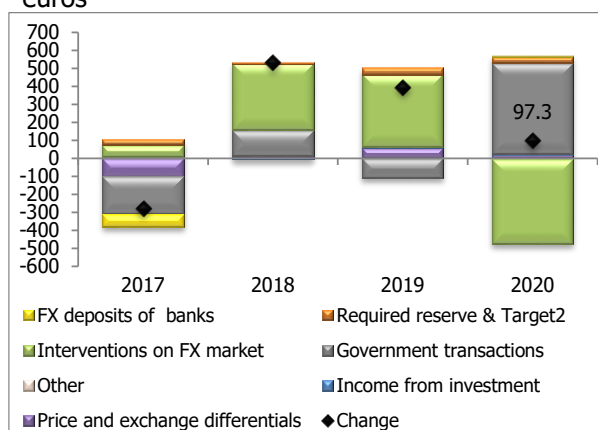
VI. Foreign Reserves Management and Investment

In 2020, the foreign reserves of the Republic of North Macedonia (hereinafter referred to as: foreign reserves) registered an annual growth, which mainly resulted from the inflows for the government, as opposed to the National Bank sale of foreign currency on the foreign exchange market. The National Bank encountered the pandemic crisis with an adequate level of foreign reserves that provided liquidity in foreign payments and protection of the Denar exchange rate, while leaving room for additional monetary response. Foreign reserves management in 2020 was prudent, adjusting the investment decisions to the volatile developments in the international markets, which enabled further achievement of the core principles: safety and liquidity of foreign reserves, with certain profitability.

6.1. Foreign reserves stock and flow

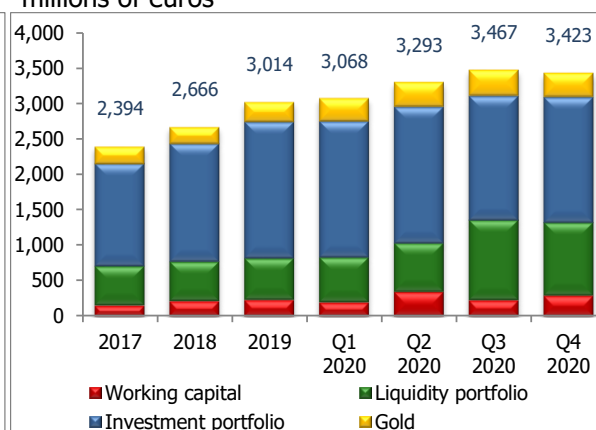
In 2020, foreign reserves increased by Euro 97.3 million and at the end of the year reached Euro 3,360 million. During the National Bank's interventions on the foreign exchange market by selling Eur 470.5 million to domestic banks, the growth of foreign reserves was almost entirely due to the net inflows of the government from abroad in the amount of Euro 503.1 million. These net inflows came from the Eurobond issued and the borrowing from the International Monetary Fund and the European Commission and completely exceeded the outflows for regular repayment of the external public debt. The market valuation of gold also contributed to the growth of foreign reserves due to the markedly high annual growth of the gold price (by 24.2%), while the depreciation of the US dollar against the euro by 8.9% on an annual basis acted moderately in the opposite direction. The increase in foreign reserves, but in a relatively lower amount, was also due to the higher allocated reserve requirement in euros by banks (Euro 15.7 million), growth of domestic banks' assets on MIPS-EUR accounts (Euro 18.8 million), foreign currency deposits of domestic banks placed with the National Bank (Euro 7 million) and foreign reserves investment income (Euro 3.8 million).

Chart 75
Foreign reserves growth factors in millions of euros



Source: NBRNM.

Chart 76
Foreign reserves tranching average level, in millions of euros



In 2020, foreign reserves were allocated in three tranches (operating, liquidity and investment tranches), the volume of which was actively adjusted according to the short-term needs for liquid foreign exchange assets on the domestic foreign exchange market and future repayments of external public debt. Within the foreign reserves, there was a special tranche

to manage gold whose security and liquidity is particularly pronounced in conditions of fluctuating movements in the financial markets.

6.1. International financial markets and active approach to foreign reserves management

Movements in international financial markets at the beginning of the year were affected by the non-economic shock caused by COVID-19 and were characterized by increased volatility in the financial instruments yields. The rapid virus spread and the uncertainty about the future pandemic developments increased the demand for debt securities issued by the most developed economies (as the most reliable and liquid instruments) and accordingly significantly reduced their yields, in deeply negative zone. In the same period, the yields on instruments with credit risk premiums increased, reflecting the lower demand for this type of instruments. These trends, however, were present for a relatively short period, given the rapid and extensive monetary and fiscal measures of the developed countries. The rapid central banks response, together with gradual easing of virus containment measures, encouraging news about the development of vaccines, the Brexit agreement and the moderate improvement of economic indicators, by the end of the year, created investor optimism in the international financial markets seen in the shifting of their interest from government securities to riskier financial instruments.

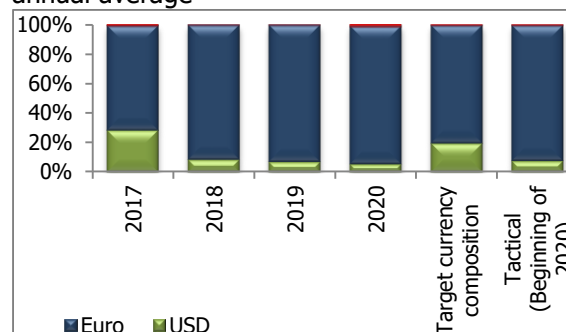
Volatile international market developments called for caution and active adjustment of investment decisions in foreign reserves management, enabling further smooth achievement of the basic investment principles: safety, liquidity and profitability. Guided by the principle of safety of investments in foreign reserves which is a top priority and gained even greater relevance with the international market developments, this year, the National Bank made the following investment decisions: 1) new foreign reserves investments in the safest financial instruments; 2) temporarily restricted placements with commercial banks given the uncertain macroeconomic environment surrounding the commercial banks around the world and the risk of a significant reduction in their profitability and assets quality seen at the onset of the health crisis; 3) uncollateralized gold deposits that matured during the year were kept on custody accounts or placed in deposits with central banks, given the uncertainty that made the assessment of the consequences on the credit position of commercial banks extremely difficult; 4) temporary suspension of the application of classic repos and reverse repos, in order for the government securities that are offered as collateral in these transactions to be available for sale in case of need for liquid assets; 5) in the second half of the year, repo transactions in securities in euros were reintroduced, and repo transactions in cross currencies were started; and 6) gold swap transactions with US dollars and Japanese yen were concluded and secured. The improved market sentiment at the beginning of the second half of the year contributed to the perception of potential future growth of government bond yields in the euro area, which prompted the National Bank to reconsider and change the interest rate exposure of foreign reserves tranches. Thus the National Bank reduced the tactical modified durations of the liquidity and investment tranche in euros by six months, to 1.0 and 1.5 years, respectively.

6.2. Foreign reserves structure

In 2020, the **currency structure** of foreign reserves was further dominated by assets invested in financial instruments in euros with an average share of about 93%, which is in line with the need to hold funds to support the monetary strategy of stable exchange rate of the

denar against the euro. The rest of the foreign reserves are almost entirely related to US dollar instruments (7%)⁶².

Chart 77
Currency structure of foreign reserves
annual average



Source: NBRNM.

The prudent and active approach to foreign reserves management, which included directing new investments to the safest assets, contributed to the increase in the average share of instruments issued by issuers/countries with the **highest credit rating** (from AAA to AA-) (to around 69%), which consequently have the lowest credit risk exposure and are considered the safest investments. Given the negative yields on debt securities, and in order to preserve the value of foreign reserves, a significant part of the investments (about 20% on average) were invested in instruments with a credit rating of A+ to A-. These investments are highly safe and liquid, but provide moderately higher returns on assets. Most of these instruments have shorter maturity and are issued by renowned commercial banks (15% of foreign reserves). In 2020, the National Bank placed a small portion of investment within the portfolios in euros and in instruments that have moderately lower investment 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. Such distribution affected the **geographical structure** of placements of foreign reserves. Thus, in 2020, they were mostly invested in instruments issued by the leading economies of the euro area (57.6% on average)⁶³, but the extremely low returns of these financial products conditioned exposure to other euro area and EU member states (19.9%)⁶⁴.

In terms of the **types of instruments in which the foreign reserves are invested**, most of the assets were still placed in securities whose share in 2020 further increased to 78.6%. Among the types of securities, government securities and securities issued with a state guarantee prevailed, which are the safest investments and which additionally increased the share in the total investments, given the active approach of foreign reserves management. Directing toward the safest instruments, together with the temporary stoppage of the placements with the commercial banks, contributed to a reduced average annual share of securities issued by the commercial banks. Part of the foreign reserves in 2020 was also maintained on current accounts (on average around 8.4%), mainly with the central banks, and to a small extent in foreign commercial banks.

In the structure of the foreign reserves, the average share of **gold** moderately increased, from 9.3% in 2019 to 10.4% in 2020, which, amid unchanged quantity, is completely a result of the increase in its market price. Namely, in conditions of an increased interest of global investors to invest in safer financial instruments amid concern caused by the pandemic and due to the depreciation of the US dollar, the price of this precious metal

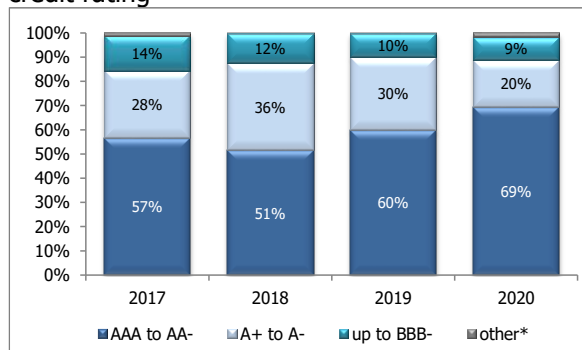
⁶²The currency structure is analyzed taking into account the stock of foreign reserves reduced by the amount of gold.

⁶³ Refer to the so-called euro area core which include Germany, Austria, Luxembourg, Finland, the Netherlands, France and Belgium.

⁶⁴ "Other euro area and EU countries" include: Sweden, Lithuania, Poland, Czech Republic and Slovenia.

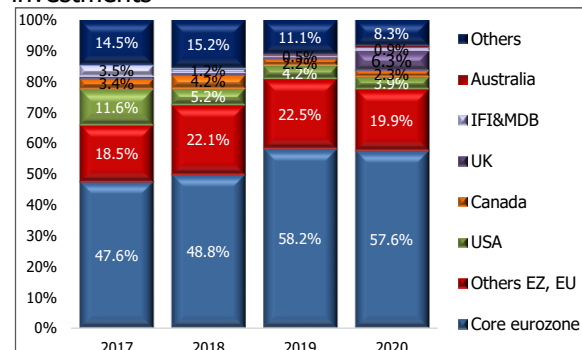
registered a high annual growth (of 24.2%) and was US Dollar 1,898 per ounce at the end of 2020.

Chart 78
Average annual structure of investments by credit rating



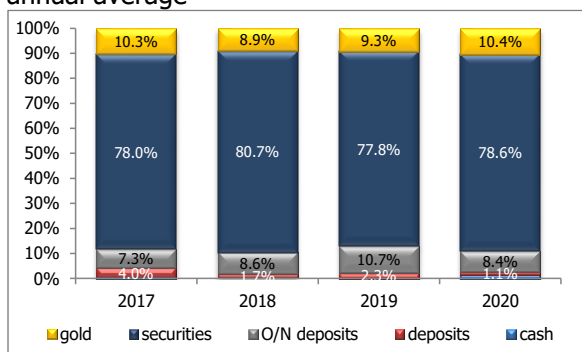
*IMF, BIS are classified in the category others
Source: NBRNM

Chart 79
Average annual geographical structure of investments



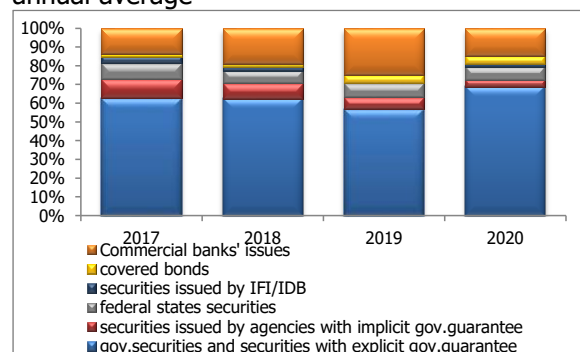
*IFI and MDB - international financial institutions and multilateral development banks

Chart 80
Investment structure, by instrument annual average



Source: NBRNM.

Chart 81
Structure by type of securities annual average



6.3. Results from the management and investment of foreign reserves

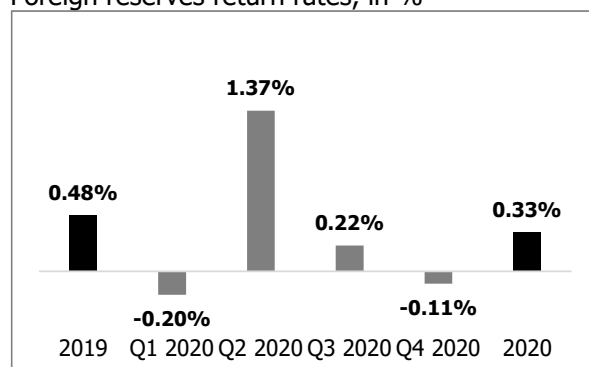
The flexible approach of foreign reserves management in accordance with the conditions on the international financial markets, together with the favorable performances from the instruments that contain a credit premium (corporate instruments of commercial banks and issuers from the periphery of the euro area) contributed to the positive return from foreign reserves management. **The total rate of return on investment of the foreign reserves for 2020 is 0.33%**, whereby in addition to the income generated by investment, it also includes calculated securities price changes and exchange rate changes realized from arbitrages with foreign currency. The growth of the prices of instruments issued by countries that are perceived as safe, made the greatest contribution to the positive financial performances for the entire year. The results were supplemented with the pronounced growth of the prices of bonds that contain a credit premium, especially in the second quarter of the year, as well as from the favorable performances from the active foreign reserves management.

Analyzed by portfolios, the operational portfolio in euros makes a negative contribution to the income from investment of the foreign reserves, given the need for maintaining readily available funds in euros on current accounts with central and commercial banks, and which

are regulated by negative interest rates. The investment portfolio in euros which covers most of the foreign reserves and includes instruments with longer maturities (despite the safest instruments, it also contains investments in instruments that offer a credit risk premium), had positive rates of return under the influence of the price movements of the instruments. In contrast, the instruments in the liquidity portfolio in euros⁶⁵ are with a shorter duration compared to the investment portfolio and in conditions of prevailing of the negative returns on the instruments in the euro area, contributed to the moderate negative return on this portfolio. The performances of all portfolios in euros were higher than the appropriate reference portfolios, which contain only the safest instruments with significantly negative yields⁶⁶.

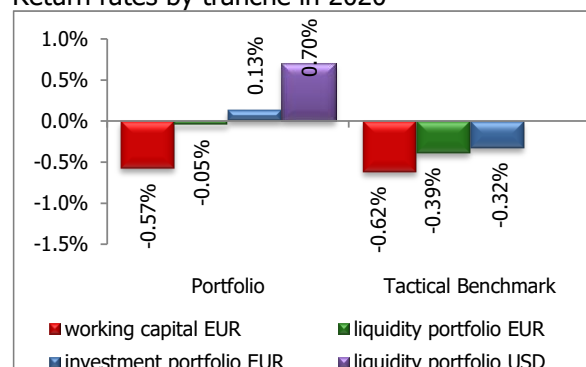
The liquidity portfolio in US dollars had a higher return relative to the portfolios in euros, due to the positive yields in the USA, despite the fact that the Fed throughout the year reduced the target level of the reference interest rate by a total of 150 basis points, to the level of 0% - 0.25%. The positive performance of this portfolio was also due to the high growth of the prices of the US government securities, caused by the increased demand for these instruments, in conditions of uncertainty on the financial markets at global level.

Chart 82
Foreign reserves return rates, in %



Source: NBRNM.

Chart 83
Return rates by tranche in 2020



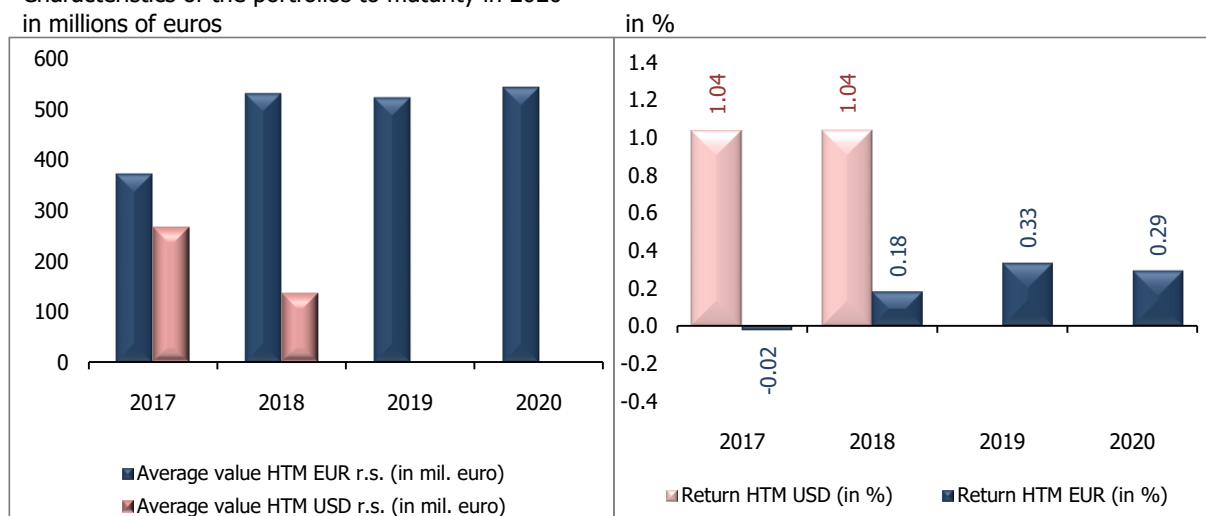
Part of the investments of the foreign reserves within the investment portfolio are also aimed at securities held to maturity⁶⁷. These securities, according to their characteristics, have a predictable and stable return and consequently reduce the exposure to interest rate risk. The level of the portfolio to maturity in euros during 2020 was relatively stable. This portfolio registered positive rates of return, considering that it was composed of government bonds issued by member states of the euro area that have a positive return to maturity.

⁶⁵ Which are intended to satisfy all contractual and potential outflows during one year.

⁶⁶ Government debt issued by member states of the euro area with a credit rating from AAA to AA.

⁶⁷ Securities classified in financial instruments measured at amortized cost.

Chart 84
Characteristics of the portfolios to maturity in 2020
in millions of euros



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

Box 3. Professional development and upgrading of the institutional capacity

Starting from March 2020, the foreign reserves management process was adjusted to the exceptional circumstances caused by the coronavirus. In accordance with the changed manner of carrying out the regular activities, the manner of professional trainings and professional upgrading was also changed. Namely, during the year, the National Bank continued to improve the knowledge and build its institutional capacity through participation of the employees involved in the foreign reserves management and investment process in specialized virtual workshops organized by the World Bank (within the Reserve Advisory Management Program), central and commercial banks, as well as through participation in video conferences. All participations in the professional workshops were used to deepen the knowledge and information about the developments on the international financial markets, the manner of adjusting to the changed market conditions, as well as to consider issues in the field of foreign reserves management. It is extremely important for the maintenance of a high level of efficiency, professionalism and quality of the human resources engaged in the foreign reserves management process.

VII. Payment services and payment systems

According to the legal mandates, the National Bank establishes, registers and oversees the safety, soundness and efficiency of payment, settlement and clearing systems. The NBRNM is the owner and operator of the Macedonian Interbank Payment System (MIPS)⁶⁸ for large and urgent payments in denars between its participants, used to settle the payment transactions related to the implementation of monetary policy, to make the final settlement of the other payment systems and securities settlement systems, as well as of the payment 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 supervisory competences over the banks and the other entities providing payment services in the country. The regulatory and catalyst role of the NBRNM is aimed at harmonization of the national regulation with the European regulation, monitoring of development tendencies and creation of an environment for their implementation in the country within the integration process towards the EU.

7.1. Harmonization of the national with the European legislation

Within the regular 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-Law on Payment Services and Payment Systems which transposes the main acts⁶⁹ of the legislation of the EU in this area. The new legal framework, which will enable the entry of new payment services providers on the domestic market, would increase the competitiveness and efficiency in the payment area and would encourage the process of digital transformation of payments. At the same time, the Draft-Law provides for greater transparency and information to payment services users about the fees with the individual services providers, a high degree of protection of consumers, through legally defined possibilities for resolving the possible complaints, as well as for extrajudicial settlement of disputes, whereby the procedures and obligations of payment services providers are clearly defined in accordance with the modern practices in this domain. Also, the provisions of the Draft-Law will provide comparability of the fees for the payment services and selection of the most favorable payment services provider. A special benefit is that the Law provides for limited interchange fees with payment cards, and for certain categories of consumers, opening of accounts with basic functions will be enabled, through which one will be able to carry out a certain number of free payment transactions.

Along with the activities for the finalization of the Draft-Law on Payment Services and Payment Systems, the National Bank actively worked on the preparation of draft bylaws for enforcement of the Law after its adoption. For these activities, technical assistance was

⁶⁸ 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.

⁶⁹The 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 single 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.

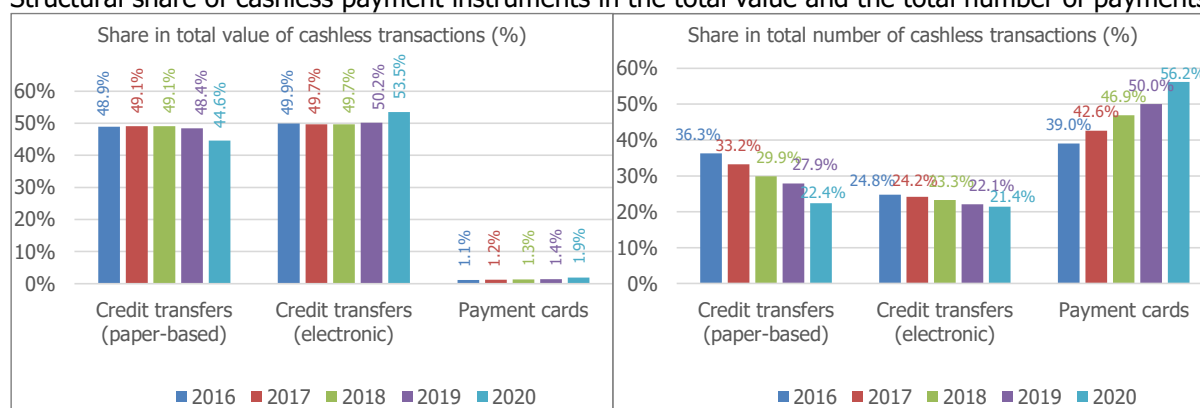
provided by the EU⁷⁰ within which the practical experiences and the applied standards and best practices with several central banks from the EU member countries were perceived.

7.2. Payment operations realized with cashless payment instruments

The total value of domestic payments⁷¹ in 2020 registered an annual fall of 5% and reached Denar 3,859 billion from 140 million transactions and annual growth of the number of transactions of 10.2%. Credit transfers again prevail (98.1%), amid an increased structural share by 3,3 percentage points of the value of credit transfers initiated electronically (share of 53.5%) at the expense of the reduced share of credit transfers initiated in paper-based form by 3,8 percentage points (share of 44.6%) and a higher growth of 0.5 percentage points (or share of 1.9%) of payment cards in the total value realized with cashless payment instruments.

Chart 85

Structural share of cashless payment instruments in the total value and the total number of payments



Source: NBRNM.

The change in the structure of payments is noticed especially in the number of transactions carried out with the individual cashless payment instruments. Thus, in 2020, the number of transactions with payment cards kept on increasing, reaching a share of 56.2% in the total number of payments (growth in the share of 6.2 percentage points on an annual basis), amid almost equal share of credit transfers initiated in paper-based form or electronically (22.4% and 21.4%, respectively). The changes in the structure, caused by the growth of the share of payment cards and the annual fall in the use of credit transfers initiated at the banks' counters (by 5,5 percentage points) to a considerable extent under the influence of the corona-crisis, unquestionably suggest a change in the habits of citizens and companies, specifically increasing use of the benefits of digitalization on the payment services market.

7.2.1. Credit transfers

The total number of credit transfers in 2020 was 61.3 million, which is an annual fall of 3.6%.

⁷⁰ The EU-funded project titled "Strengthening of the institutional capacity of the National Bank of the Republic of North Macedonia in the process of its accession to the European System of Central Banks", took place in a time period of 18 months. The main aim of this project was to support the National Bank in the maintenance of the stability of the macroeconomic and financial system, through harmonization of the legislation, the policies, the rules and the standards of the operations with the requirements of the European System of Central Banks.

⁷¹ 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.

The structure of credit transfers, in terms of user, is still predominated by legal entities with 71.2% (70.1% in 2019) while, the rest of 28.8% are initiated by natural persons. Although the citizens to make the credit transfer payments often used the banks' counters (69.3%), however from the commencement of the corona-crisis onwards, it is noticeable that natural persons increasingly used the benefits of e-banking (the share of these transactions is 30.7%, compared to 22% the previous year). Moreover, 66.7% used personal computers, 32.6% mobile phone applications, while an insignificant percentage of the population used ATMs for that purpose.

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

Number of credit transfers (structural share) (2020)	Natural persons (%)	Legal entities (%)
<i>By method of initiation</i>		
Paper-based	69.3	43.9
electronic	30.7	56.1
<i>By device of initiation of the electronic credit transfers</i>		
PC	66.7	98.5
Cell phone	32.6	1.5
ATM	0.7	/

Source: NBRNM.

Unlike natural persons, legal entities predominantly, or 56.1% 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 98.5%, and only 1.5% used the mobile banking applications for that purpose.

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 (48.7%), compared to the the old EU⁷² member states from CESEE⁷³, where the share of electronically initiated credit transfers in the total number of credit transfer transactions is 94% and 89%,⁷⁴ respectively.

7.2.2. Payment Cards

The total number of transactions with payment cards issued by domestic issuers at terminals located in the country in 2020 was 106.4 million, which is an annual increase of 15.6%. Moreover, also in this as in recent years, the structural share of the number of POS transactions increased by 3 percentage points, reaching 70%, at the expense of the reduced share by 6 percentage points of transactions for ATM cash withdrawals (23%). The change of the citizens' habits due to the conditions imposed by the COVID-19 pandemic also contributed to a significant growth of the use of payment cards at domestic virtual (Internet) points of sale, which amounts to 7%, but it is still relatively low, and there is also a small use of cards for ATM cash deposits in the country.

In 2020, 4.4 million transactions (annual fall of 35.6%) were performed with payment cards issued by foreign issuers, at terminals located in the country. The reduction of these transactions is an expected occurrence due to the closure of the borders and the reduced travels as a result of the global health crisis. However, in terms of the structure and habits of the use of foreign payment cards in the country, their increasing use for payments at POS terminals is still visible (share of 73%), amid stable and unchanged use for ATM cash withdrawals (share of 20%). Moreover, there was an annual growth of 4 percentage points,

⁷² Austria, Belgium, Germany, Greece, Denmark, Ireland, Italy, the United Kingdom, Portugal, Finland, France, the Netherlands, Sweden and Spain.

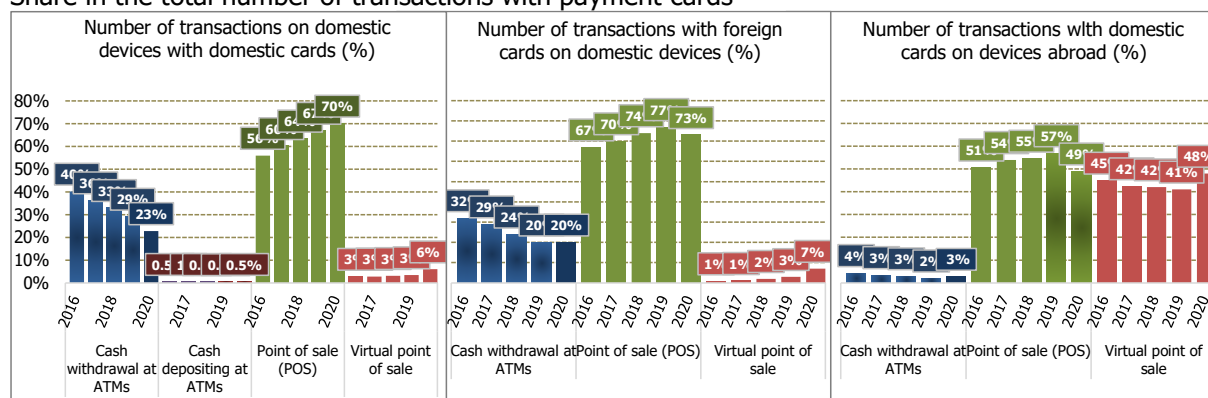
⁷³ Bulgaria, Estonia, Cyprus, Latvia, Lithuania, Poland, the Czech Republic, Romania, Slovakia, Slovenia, Hungary and Croatia.

⁷⁴ The latest available data for the EU member states are as of 2019.

i.e. a share of 7% of the use of foreign payment cards for payment at the domestic virtual (Internet) points of sale.

Chart 86

Share in the total number of transactions with payment cards



Source: NBRNM.

In 2020, 5.7 million transactions were performed with payment cards issued by domestic issuers at terminals located abroad, which is a significant reduction of 31.5% compared to last year, primarily as a result of the closure of the borders and the procedures for leaving the country in times of pandemic. 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 3% in the number of the total transactions with cards from domestic issuers at terminals outside of the country). In conditions of pandemic, the increased use of payment cards by domestic issuers for payment at the virtual (Internet) points of sale of foreign entities (48.4%) is also expected, which increased by 7 percentage points compared to 2019, which almost became equal to the share of payments at POS terminals (48.6%).

7.3. Payment infrastructure

The total number of transaction accounts in the country opened with the commercial banks at the end of 2020 amounts to 3.82 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 through which they can make electronic payments, while, for legal entities, 36% of the total number of transaction accounts enable electronic payments, which is an increase of 5 percentage points compared to the end of 2019.

The total number of payment cards issued by domestic entities at the end of 2020 amounted to 2.1 million cards and increased by 14.6% compared to the end of 2019. The greatest contribution to the annual growth of the number of payment cards in circulation is due to the issuance of the domestic payment card, as one of the measures of the Government of the Republic of North Macedonia for the revitalization of the Macedonian economy in conditions of COVID-19. In 2020, the issuers of payment cards in the country continued to apply the advanced technologies underlying the operations with payment cards worldwide. In this context, besides the new payment cards issued within the government project, contact cards were rapidly replaced with contact-contactless cards, including payment cards whose term was still not expired, whereby at the end of 2020, the share of contact-contactless cards was significant 62% of the total number of cards with a payment function, which is an increase of 9 percentage points, compared to the share at the end of 2019. In 2020, there was progress

in the part of the offer of virtual wallets through integration of the contactless card with the mobile application.⁷⁵ 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 34.5% on an annual basis in 2020, there is also an annual growth of 16% (or twice faster annual growth than that recorded at the end of 2019) of the number of terminals installed at the points of sale which, in addition to contact, also support contactless technology, thereby reaching a high share of 73% in the total number of terminals for electronic payments at POS terminals at the end of 2020 (24,466 installed contact-contactless terminals out of a total of 33,699 terminals). Increased offer and use of modern digital devices for making payments in 2020 is also noticed through an annual increase of 18% in the number of ATMs with an additional function for depositing cash (193 ATMs), while, the number of ATMs with an additional function for initiating credit transfer (359) is relatively stable.

At the end of 2020, amid an insignificant annual growth of 0.1%, the total number of merchants in the country who accept payments with payment cards reached 13,256, whereby the largest share of 90.4% is that of merchants who accept payments at POS terminals (11,987), while 9.6% or 1,269 are merchants who accept card payments at virtual points of sale. As a result of the corona-crisis, the social distance and the need for protection of citizens, companies started to open a large number of virtual stores, so compared to last year, there was a significant annual growth of the number of merchants who accept card payments at virtual points of sale (by 45%), amid a moderate decline in the number of merchants who accept card payments at POS terminals (3.1%).

7.4. Payment systems in the country

In 2020, the total value of transactions in the country through payment systems reached Denar 15,729 billion, registering an annual growth of 10.9%, amid realized 29.6 million transactions, which registered a moderate annual fall of 3.6%. 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 KIBS⁷⁶. An insignificant part is executed through the payment system CaSys⁷⁷. In the structure of the number of transactions in the same period, the largest share was that of the payment system KIBS (78%), followed by the payment system MIPS with 22%, while CaSys has a small share (0.03%).

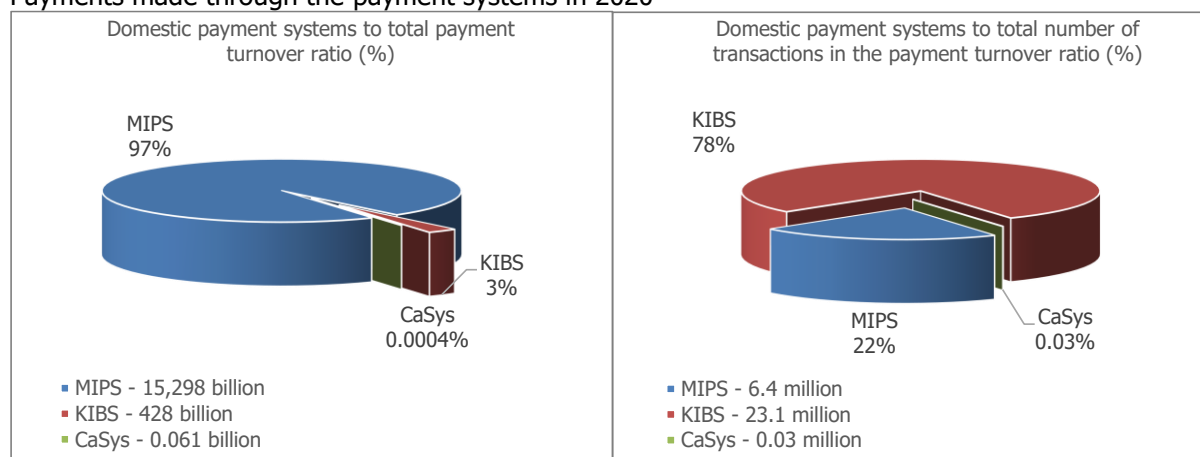
⁷⁵ In 2020, another bank offered a virtual wallet based on integration of the contactless card with the mobile application, whereby such service is already offered by three banks.

⁷⁶ 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.

⁷⁷ International Card System AD Skopje (CaSys) is a system of multilateral deferred net settlement of payments with domestic brands of payment cards.

Chart 87

Payments made through the payment systems in 2020



Source: NBRNM.

Net settlement of payments through KIBS and CASYS is made on a regular basis through MIPS, which in 2020 worked for 247 days, ensuring 99.97% accessibility of the participants to the system.

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

The National Bank 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 oversight⁷⁸ which translates the internationally established oversight standards⁷⁹. The National Bank performs the payment systems oversight directly, by insight with the operator who is managing the payment system and indirectly 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 2020, the National Bank completed the on-site part of the 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 of the remaining seven principles for important payment systems⁸⁰. The subsequent activities for preparation of the report with the confirmed findings and its submission to KIBS for further action are under way. The completion of this oversight will wrap up the oversight over the payment system KIBS according to all requirements of the principles that are applicable to important payment systems. Also, the on-site part of the direct partial oversight of the operator of the payment system MIPS for assessment of the compliance with nine principles was completed.

⁷⁸ Decision on the manner and methodology for payment systems oversight (Official Gazette of the Republic of Macedonia No. 17/16) and the Decision on criteria and standards for payment systems operations (Official Gazette of the Republic of Macedonia No. 17/16).

⁷⁹ 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.

⁸⁰ The oversight of KIBS for assessment of the compliance of the operation of this payment system with the requirements of the other 6 applicable principles for important payment systems was performed with two partial oversights. The first one, which refers to two principles, started in November 2017 and ended with the implementation of all recommendations by the operator KIBS in November 2019. The second partial oversight whose aim were four principles started in December 2018 and ended with the implementation of the relevant recommendations in December 2020.

At the end of 2020, the National Bank started with direct partial oversight of the payment system MIPS with the remaining part of the requirements for systemically important payment systems and started with the direct full oversight of the operator of the payment system CaSys for assessment of the compliance with all requirements of the principles that are applicable to other payment systems. The reports with the findings from the performed direct partial oversight over the payment systems MIPS and CaSys will be prepared during 2021, which will complete the oversight of all payment systems according to all appropriately applicable principles.

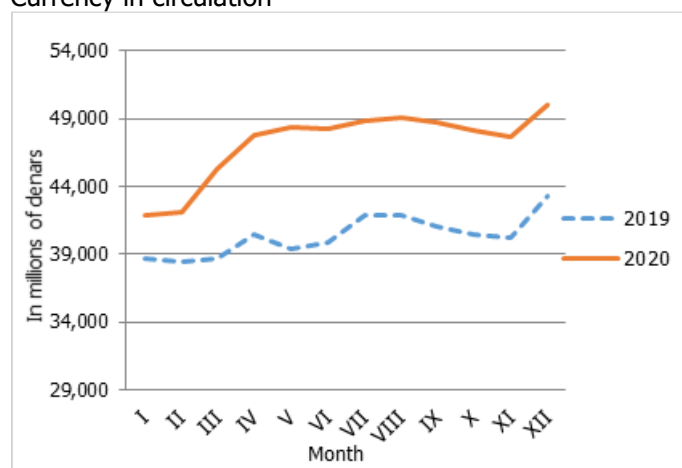
At the same time, off-site monitoring of the payment systems was conducted on a regular basis, on the basis of which it was determined that during 2020 the payment systems in the Republic of North Macedonia operated with a high level of operativeness, availability and efficiency, without registered falls and disturbances. This is especially important in circumstances when the country faced the corona-crisis and is a result of previously established and tested procedures for ensuring business continuity in accordance with the standards for their operations prescribed by the National Bank. In conditions of pandemic, the National Bank took a series of measures ensuring a high level of information security, as well as protective measures for employees, providing continuity of the operations of the critical working processes related to the payment systems operations. Overall, the payment systems in 2020, despite the challenges posed by the COVID-19 pandemic that changed the manner of carrying out working processes (work from home and with rotating shifts on the premises at the operating places), operated efficiently, thereby ensuring smooth and stable execution of the payments in the Republic of North Macedonia.

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

8.1. Currency in circulation

As of 31.12.2020, the total amount of the currency in circulation amounted to Denar 50,029 million, which is by Denar 6,706 million or 15,5%⁸¹ more compared to the end of 2019. The structure of the currency in circulation suggests that at the end of the year, banknotes and coins make up 97.8% and 2.2%, respectively of the total value. In terms of the number of pieces of currency in circulation, the share of banknotes equals 28.6% (110.3 million pieces), and the share of coins equals 71.4% (275.2 million pieces).

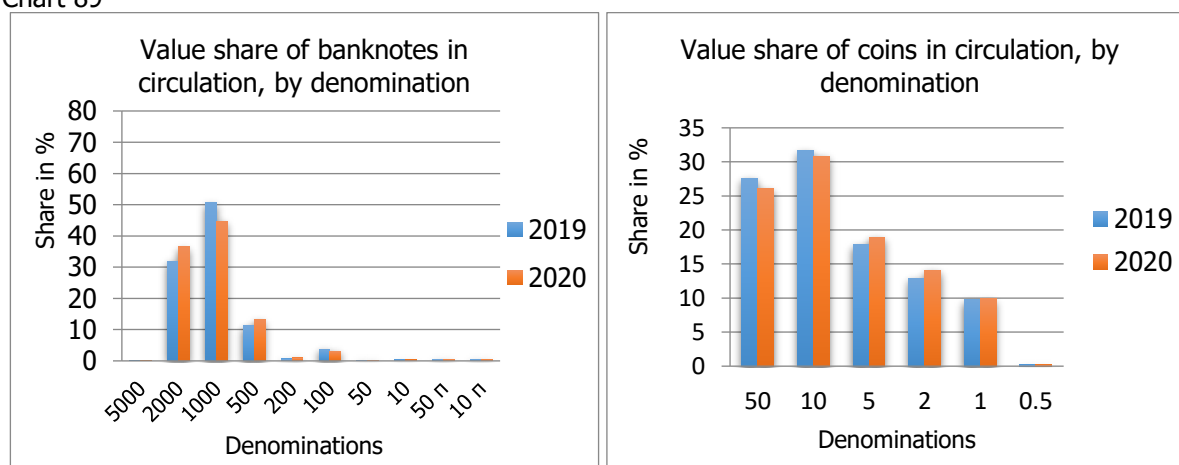
Chart 88
Currency in circulation



Source: NBRNM.

Banknotes in denomination of Denar 1000 (44.7%), Denar 2000 (36.5%) and Denar 500 (13.1%) account for the most of the total value of banknotes in circulation. Other banknotes account for 5.7% of the total value. In 2020, coins in denominations of Denar 10 (30.9%), Denar 50 (26.1%) and Denar 5 (18.9%) had the largest share in the value of coins.

Chart 89⁸²

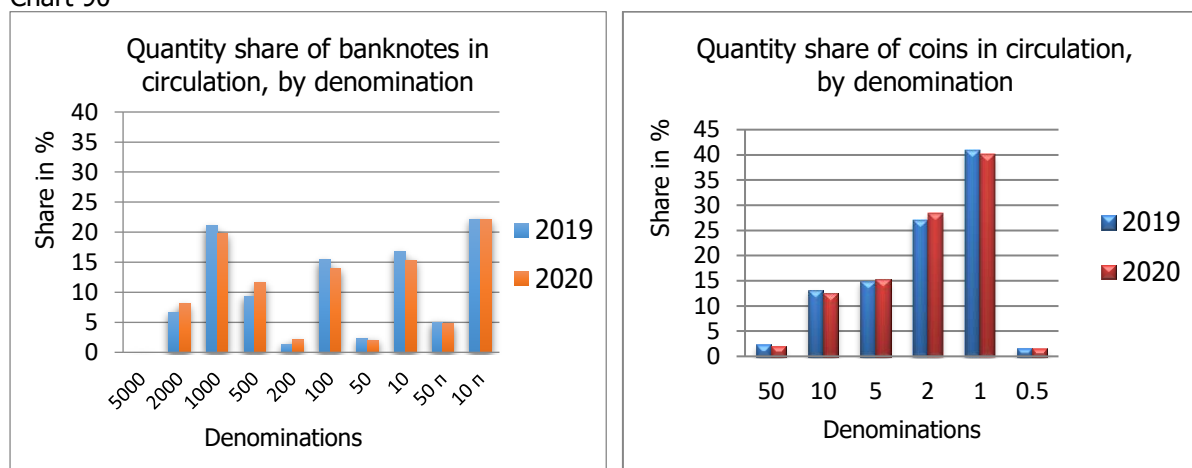


Source: NBRNM.

⁸¹ 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 2020, was Denar 11.2 million.

⁸² The letter "p" in the charts denotes polymer banknotes.

Chart 90



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 (22.1%), Denar 1000 (19.8%), Denar 10 (15.4%) and Denar 100 (14%) is the largest. Other banknotes constitute 28.7% of the total quantity of banknotes in circulation. The largest share of coins in circulation is that of the denomination of Denar 1 (40.1%) and Denar 2 (28.4%).

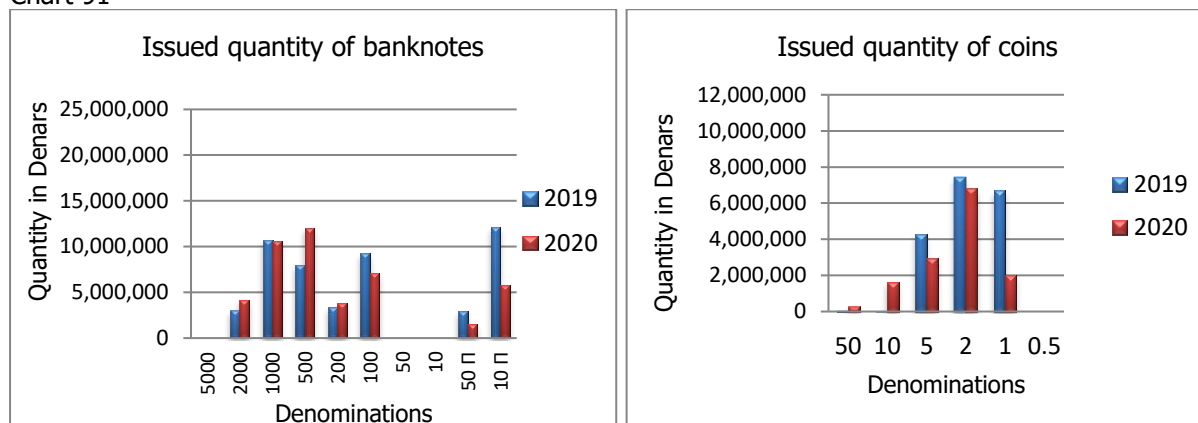
In the structure of the issued currency in circulation, polymer banknotes have an insignificant share (1%) relative to the other banknotes, whereby one should bear in mind their small nominal value and the relatively short period of circulation. According to the quantity, the share of polymer banknotes in the total number of banknotes in circulation is substantial and amounts to 27%, taking into account their important role in retail.

8.2. Supplying banks and cash centers with banknotes and coins

During 2020, the National Bank issued cash to banks and cash centers⁸³ in the amount of Denar 26,599 million (increase of 17.9% compared to 2019). At the same time, cash has been received from banks and cash centers in the amount of Denar 20,256 million (increase of 6.3% compared to 2019). 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 25.5% in 2020 (i.e. 25.7% in 2019) and the most common coin is the denomination of Denar 2 with a share of 40.9% in 2020 (versus 29.9% in 2019).

⁸³ During 2020, in the activities related to the cash supply process, the two cash centers where part of the cash operations were transferred from the commercial banks, continue to actively function.

Chart 91



Source: NBRNM.

8.3. Processing and destroying banknotes and coins

During 2020, in the process of control of the quality of banknotes in circulation, a total of 36.6 million pieces were processed, out of which 4.1 million pieces were destroyed due to unfitness for circulation (12.7 million banknotes in 2019). Most destroyed banknotes were denominated in Denar 100 (52.1%) and Denar 500 (23.2%). In 2020, 3.7 million pieces of coins in denominations of 1, 2, 5, 10 and 50 denars were processed, 16 thousand pieces of which being withdrawn as unfit for circulation.

8.4. Expertise of suspicious / counterfeit money

In 2020, 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 the submitted suspicious money. In order to strengthen the capacities for accurate detection of counterfeit money with officers engaged in daily cash handling, in 2020, the National Bank intended to strengthen the specialized training of staff in banks and cash centers, but due to the measures for prevention of spreading of the coronavirus, it postponed them. The trainings planned in accordance with the national training plan were also postponed, within which, the experts of the National Bank were supposed to provide trainings for the police officers and the employees in the other institutions involved in the combat against counterfeiting money.

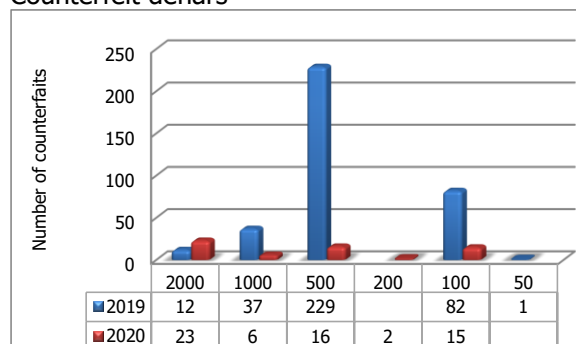
As for the number of expertises carried out during 2020, out of a total of 62 expertises performed on the submitted suspicious banknotes denominated in denars, it was determined that all samples are counterfeits, which is a decrease of 83% compared to the identified counterfeit banknotes detected during 2019. Of the total number of detected counterfeit banknotes in 2020, the most common is the denomination of Denar 2000 (23 pieces), or 37.1% of the total number of counterfeits, followed by the denomination of Denar 500 (16 pieces), or 25.8% of the total number of counterfeits and the denomination of Denar 100 (15 pieces), or 24.2% of the total number of counterfeits. The total value of Denar counterfeits in 2020 amounted to Denar 61,900.00, 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 164 samples of damaged banknotes submitted by banks and cash centers.

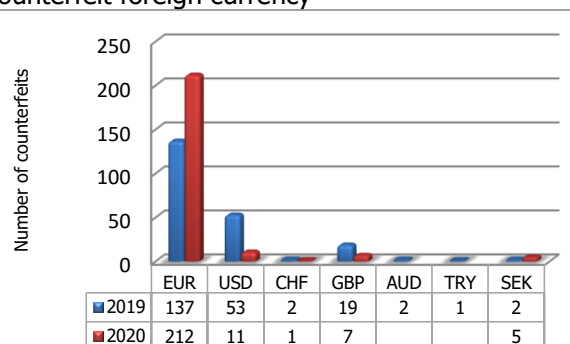
Also, during 2020, the National Bank replaced the damaged banknotes and coins submitted by natural persons, and replaced the currency withdrawn from circulation, and for which there is no time limitation for their replacement. The National Bank replaced a total of 1,053 banknotes and 17,698 pieces of banknotes withdrawn from circulation.

Chart 92

Counterfeit denars



Counterfeit foreign currency



Source: NBRNM.

In terms of committed expert analyses of received suspicious banknotes and coins denominated in foreign currency in 2020, of total 279 analyses, 236 counterfeit and 43 original money were identified. Of the total number of counterfeit banknotes, the Euro banknotes (212 pieces) and US dollars (11 pieces) prevailed. As the previous years, the number of registered counterfeit coins is insignificant and reduces to a total quantity of 3 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 properties⁸⁴.

In October 2020, the National Bank concluded a [Cooperation Agreement with the European Central Bank \(ECB\) in the field of the protection of euro banknotes against counterfeiting](#). This completes the framework of the cooperation in terms of the protection of the euro against counterfeiting, taking into consideration the Cooperation Agreement with the European Commission in the field of the protection of euro coins against counterfeiting, which was concluded last year.

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

Observing the measures for prevention of spreading of the coronavirus, the National Bank during 2020 dedicated itself to the indirect controls of the data for the type and the number of the money processing machines, their locations and the quantity of the money processed through the processing machines and the money processed manually, that banks and cash centers submit to the National Bank on a quarterly basis.

In the reference period, a total of 30 regular tests of banknote and coin processing machines were conducted, due to expiration of the validity of the confirmations proving the machines' ability to perform proper money processing.

⁸⁴ The expert analysis of the technique of making counterfeit banknotes found that they are mostly made on a plain paper without enough security features, by using computer technique (scan and print) or color copy machine.

8.6. 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 interest in the country⁸⁵. In 2020, a total of 90 pieces of collector coins were sold, of which 69 pieces through the National Bank and 21 pieces through the commission agent.

⁸⁵ In order to increase the interest in these coins and to make them available, the National Bank enabled commission sale through the Mother Teresa Memorial House, Skopje in the afternoon and on non-working days.

IX. Internal audit

In 2020, the Internal Audit Department (IAD) 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 2020, a total of 17 audits were carried out (14 regular audits and 3 extraordinary audits), covering 17 working processes. For the confirmed findings, the IAD gave a total of 22 recommendations for improvement of the internal control system. The recommendations were followed up on a regular quarterly basis, whereby the findings of the monitoring suggest that the recommendations are mainly observed and implemented within the given deadlines. The level of realization of a total of 28 given recommendations, from last years (12) and from 2020 (16), with a realization deadline in 2020 is 82%, i.e. only 5 recommendations are not realized and a new realization deadline is set for them.

Besides the ongoing activities, the internal audit also implemented the Quality Assurance and Improvement Program in the Internal Audit Department. From this perspective, within this program, during 2020, the IAD revised and adopted a new Regulation and new Technical guidelines for operation of the internal audit, prepared Instructions for carrying out audits of projects and an appropriate methodology for project risk assessment, as well as other activities in the domain of the internal audit.

The operation of the Internal Audit Department was closely supervised by the Audit Committee, which held regular meetings during 2020.

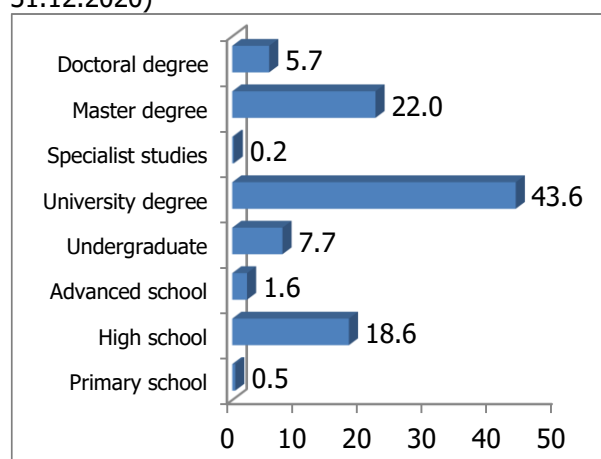
X. Human resources management

The human resources management is one of the key factors for the successful functioning of every organizational unit. 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 operating goals.

At the end of 2020, the number of employees⁸⁶ of the National Bank was 434 and it reduced compared to the end of 2019 (440 employees). Accordingly, there is also a slight change in the gender structure of the employees of the National Bank compared to the previous year. Namely, the female population in 2020 is 57.6%, and the male population 42.4% of the total employees, as opposed to 58.3% of the female population, i.e. 41.7% of the male population in 2019.

Chart 93

Qualification structure of the employees in the National Bank according to the Macedonia Qualifications Framework (in percentages, as of 31.12.2020)



Source: NBRNM

Employees with higher education (four-year university studies) dominate the qualification structure with 43.6%, followed by employees with masters degree (22%). In terms of age structure, the median age of employees in 2020 was 44.8 years (44.2 years in 2019).

The processes of professional development, annual employee evaluation and remuneration are processes that the National Bank applies in order to affect the professional development of its employees and their career. Also this year, the organizational units were advised (this year virtually), in reference to the manner of the implementation of the process of

employee evaluation, the challenges faced by the evaluators, the evaluators' recommendations with respect to the evaluation process, as well as the connection between the evaluation process and the achievement of engagement with the employees.

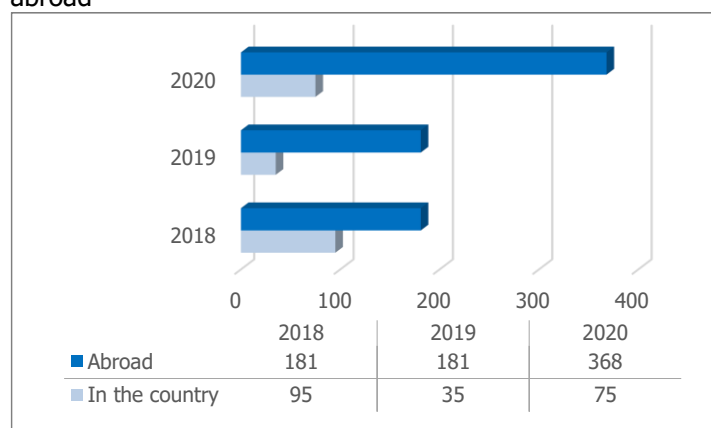
The National Bank has been constantly investing in the professional training of the staff in order to achieve its strategic objectives, mission and vision. During 2020, 443 professional training courses were attended in the country and abroad.

Compared to the previous 2019, it can be noticed that the total professional trainings in 2020 registered slightly more than a twofold increase, which is largely due to their manner of organization. Namely, in order to adjust to the new working conditions, in response to the pandemic, the organizers of the professional trainings performed a significant portion of the events planned to be held with a physical attendance, in a virtual format, which created room for a larger number of participants.

⁸⁶ The total number of employees, including those hired through temporary employment agency, was 440. The charts in this section take into account the total number of employees.

Moreover, the professional trainings organized by both foreign and domestic organizers registered a twofold increase in 2020 compared to the previous 2019. The total 443 realized professional trainings include e-courses, seminars, workshops, webinars (a total of 128 realized webinars in the country and abroad). At the same time, in 2020, the number of employees who attended professional training course also increased by 19.3%, compared to the previous 2019. The increase in the number of employees who attended professional training course is due to the increased number of professional trainings, as well as to the attendance of several employees in the same virtual event.

Chart 94
Number of professional training courses in the country and abroad



Source: NBRNM

training courses in the country are primarily hosted by domestic education centers that provide training on data protection and amendments to legislation in the area of the National Bank operations.

In addition, in order to spread the knowledge and use the internal human capacity for the purpose of strengthening and improving the employees' digital skills, in 2020, the National Bank also conducted specialized e-training courses, with an internal lecturer, which will continue as a practice also in 2021.

Main international institutions that organize professional training courses include the European central banks, the International Monetary Fund in cooperation with the Joint Vienna Institute, the Bank for International Settlements who are the National Bank's major partners in the mutual cooperation programs. Also, a significant number of professional trainings have been realized within the projects funded by the pre-accession funds of the European Union. The professional

XI. Implementation of the Plan of Activities for 2020

Introduction

During 2020, the National Bank of the Republic of North Macedonia achieved its strategic objectives in emergency and difficult conditions as a result of the health COVID-19 pandemic. Moreover, in accordance with the measures for protection against spreading of the virus, as well as the practices of the international financial institutions and the central-banking community, the National Bank took several specific activities primarily for protection of the health of the citizens, including its employees. The undertaken activities and measures also provided continuity in the operations of the National Bank and day-to-day performance of its legal objectives and functions.

In order to mitigate the potential effects on the economy caused by the COVID-19 pandemic, the National Bank adopted several decisions and measures in accordance with its competences to maintain monetary and financial stability, as well as to improve the overall working environment of the companies and support the Macedonian economy. Thus, the National Bank remained consistent in the maintenance of the stability of prices and the domestic currency, and the banking system showed that it dealt with the shock of the corona crisis successfully. Also in conditions of COVID-19 pandemic, the National Bank actively worked on the realization of the planned program activities, and thus on the strengthening of its institutional capacity.

[The Plan of Activities of the National Bank for 2020](#) (hereinafter: Plan of Activities) is a detailed elaboration of the eleven strategic objectives set out in the [Strategic Plan of the National Bank of the Republic of Macedonia for 2020-2022](#) (hereinafter: Strategic Plan). The Plan of Activities contains 151 program activities with the most of them covering regular work processes directly related to the strategic objectives and legal tasks of the National Bank, implemented during the year. Also, there were extraordinary activities which arose from the new working conditions. During the year, the National Bank also delivered a larger number of projects, which enable realization of its vision, which is to be recognized as an independent, accountable, professional and transparent institution whose credibility and integrity are constantly confirmed.

Strategic objective 1 – Maintaining price stability through a stable exchange rate of the denar against the euro

In 2020, the activities for the maintenance of the monetary stability were carried out in conditions that required well-thought out, timely and appropriate decisions that enabled mitigation of the negative effects on the economy caused by the COVID-19 pandemic and provision of conditions for normal functioning of the banking system and the companies in the country. Regarding the **implementation of the monetary policy**, the National Bank regularly conducted the monetary operations, taking into account the exceptional circumstances related to the spread of COVID-19. In order to increase the liquidity of the banking system and support the credit flows in the economy, **on the basis of constant monitoring and analysis of the possibilities for providing liquid assets to the banks through the main set of monetary instruments**, the National Bank made several changes in the monetary instruments which provided liquidity support to the banking system and the domestic economy. Also, in August 2020, in order to meet the possible needs for liquidity in euros, in conditions of disturbances on the market due to the COVID-19 shock, the ECB allowed the National Bank of the Republic of North Macedonia a [repo line](#) in the amount of Euro 400 million for providing foreign currency liquidity in euros for the financial institutions in the Republic of North Macedonia through the central bank.

In the process of operational implementation of the monetary policy, **the attention of the National Bank was also directed towards the developments on the foreign exchange market, in order to ensure further maintenance of the stability of the exchange rate of the denar against the euro.** In this context, the National Bank undertook numerous **activities in order to maintain the stability of the exchange rate of the denar**, which included: comprehensive analyses and active monitoring of the developments and trends on the domestic foreign exchange market; daily communication with the banks for providing additional information necessary to better understand the movements; reactivation of the possibility of the domestic banks for placing foreign currency deposits in euros with the National Bank; and presence of the National Bank on the foreign exchange market through interventions with the market makers.

Most of the program activities in the area of the monetary policy setup related to the preparation of the macroeconomic forecasts, the regular surveys and analyses that are used when making the monetary policy decisions took place with the regular dynamics and contributed to the **maintenance of the price stability through a stable exchange rate of the denar against the euro**, as the main strategic objective of the National Bank.

The program activities for further development of the analytical infrastructure of the macroeconomic forecasts were regularly carried out. Besides the usual checks and improvements of the existing models, the National Bank carried out the activities related to the construction of the DSGE model for analysis of the policies in North Macedonia with the help of the technical mission from the Czech National Bank.

During 2020, the National Bank updated the main indicators underlying the existing monetary strategy, by reassessing the monetary transmission through interest rates and assessing the harmonization of the real effective exchange rate with its fundamentals by applying the two approaches (BEER and FEER)⁸⁷. During the year, the indicators for the vulnerability of the Macedonian economy and for the individual countries in the region were also discussed, and the regular revision of the sustainability of the external and the public debt was also carried out. On a regular basis, the National Bank conducted the Bank Lending Survey, as well as the Survey on Inflation Expectations and Expectations for the Movement of the Real GDP in order to obtain important input elements when forecasting the future macroeconomic flows. For the needs of the balance of payments forecast, the National Bank conducted surveys of the business plans of the largest exporters and importers.

In order to see the latest developments in the Macedonian economy as a whole and in the individual sectors of the domestic economy, as well as to assess their implications on the monetary policy, the National Bank prepared its **regular monthly and quarterly reports, as well as the [annual report on its operations](#)**. In order to ensure monetary policy transparency, the National Bank regularly prepared and published press releases and presentations intended for the public, which gave a detailed review of the expectations for the next period and their effects on the monetary decisions.

Given the uncertain environment in 2020 and its influence on the economy, the National Bank made several presentations, internal analyses and research on current topics in the field of macroeconomics. The National Bank also carried out the analyses related to the new viral infection COVID-19 and the possible effects on the domestic economy, the banks' perceptions and the impact of the confidence channel on the household deposits and the demand for foreign currency. At the same time, the National Bank published several macroeconomic analyses, in the form of [analytical appendices](#) within the regular quarterly reports, and some of them were related to the effects of the pandemic on the currency exchange market and on the economy as a whole.

⁸⁷ BEER-Behavioral Equilibrium Exchange Rate; FEER-Fundamental Equilibrium Exchange Rate.

Strategic objective 2 – Maintaining stable and reliable banking system as the main prerequisite for financial stability and sustainable economic growth of the country

During 2020, the National Bank continues to **improve the legislation in the domain of banking and supervision** in accordance with the provisions of the directives of the EU⁸⁸ and the recommendations of the assessment mission of the International Monetary Fund and the World Bank, FSAP⁸⁹. Also, some of the **amendments to the bylaws were related to the effects of the corona crisis in order to adjust to the new working conditions**⁹⁰. Thus, in April 2020, the National Bank adopted regulatory changes that allow banks and savings houses, by changing the contractual terms, to ease the financial burden of borrowers, and in May 2020, the National Bank [canceled the fee for issuing data to natural persons from the Credit Registry](#) for their debt to banks and savings houses, which reduced their financial burden.

During the year, the National Bank prepared the Draft-Law on Resolving Banks and the Draft-Law on Macro-Prudential Supervision, as well as draft by-laws on resolving banks and two draft by-laws which arise from the Law on Payment Institutions and Payment Systems. Also, the National Bank prepared the Law on Financial Stability, and it also worked on the by-laws in the field of [liquidity risk](#), [determining connected persons/entities and exposure limits](#), [credit risk](#), [the risk management methodology](#), [the methodology for identifying systemically important banks](#) and the [capital adequacy](#).

Box 4. Improvement of the regulation for harmonization with the EU legislative provisions on capital requirements and the efficiency of the analysis of the banking system and financial stability

New regulation on **the liquidity risk management** was designed during the year, which introduced the Liquidity Coverage Ratio as a short-term liquidity standard which is followed and complied by the banks as of January 1, 2021. The requests from the EU legislative on capital requirements from credit institutions and investment companies were followed in the preparation of the new regulation, including the amendments to this regulation from May 2019 as well as the appropriate acts by the European Commission. Despite this novelty, the new regulation enables further improvement of the liquidity risk management, primarily in the area of liquidity risk monitoring, by following the overall liquidity coverage ratio by each significant currency, implementing and maintaining appropriate maturity structure, following the fund sources and their concentration, following the available unencumbered assets and determining, following and maintaining internal liquidity indicators. New reports on the liquidity risk were prepared in accordance to the new Decision on liquidity risk management. Regarding the decisions made on the methodology for liquidity risk management, as well as the Decision on determining linked persons/entities and exposure limits, an update of the answers given in the questionnaire by EBA was made, in terms of the compliance with the EU legislative. More appropriate implementation of the EU provisions on capital claims is enabled with amendments to the Decision on the methodology for determining the capital adequacy.

In 2020, the NBRNM continuously worked on the improvement of the **efficiency of the banking system's analysis and financial stability** in the field of monitoring the possible sources of **credit risk realization** in the operations of banks. A data storage is planned for the Credit Registry that will enable overall and flexible review of the input in the Credit Registry.

Number of activities on the **improvement of the systemic analysis** were performed during the year in support of the macroprudential policies in order to maintain financial

⁸⁸ The Capital Requirements Directive CRD and the Bank Recovery and Resolution Directive.

⁸⁹ FSAP - Financial Sector Assessment Program.

⁹⁰ [Decision on the methodology for credit risk management](#), [Decision on the methodology for determining capital adequacy](#), [Decision on the contents and the manner of functioning of the Credit Registry](#), [Instructions for implementation of this Decision](#).

stability. Therefore, we have completed the activities on reviewing and signing memorandums for data exchange with other financial regulators, in order to have more frequent analysis on the rest of the financial institutions⁹¹. We introduced a practice of having meetings on regular basis, therefore several meetings were held with the Ministry of Finance and the Securities and Exchange Commission. To enhance the financial stability coordination, a new [Memorandum for intra-institutional cooperation of regulators](#) was concluded in April 2020, in accordance to the recommendations from the IMF and the World Bank. The institutional capacity is enhanced with the conclusion of the Memorandum of cooperation, as well as the level of cooperation between financial supervisory bodies, in monitoring the financial system conditions, timely identification of systemic risks and undertaking appropriate measures and activities to prevent and reduce their impact on the financial system, which additionally enhances the resilience of the financial system to shocks. The Memorandum provisions aim to promote the role and extend the composition of the Financial Stability Committee⁹² (by including all financial regulators⁹³ and the Deposit Insurance Fund) following the model of the European Systemic Risk Board. In order to monitor the systemic risk, we made a list of indicators for early warning and within the twinning project⁹⁴ with the Croatian National Bank we made a draft-regulation on sale of claims.

In order to monitor the developments in the banking and financial system, data on the banking system were regularly published and [quarterly reports](#) on the risks in the banking system were prepared. In line with the financial stability, financial stability indexes were monitored and the content of the [Financial Stability Report](#) was improved and enriched with new annexes which referred to: Survey on the financial stability risk assessment in the Republic of North Macedonia and [Survey on the banks' perceptions on the business activities and operating risks](#) which is conducted once a year, by the end of the first quarter and reflects the assessments and expectations of banks in the following period of the year.

There are **two important projects** finished in 2020: the project for [fintech solutions Strategy](#) and project for [consumer protection activities](#). With technical and financial help by the EFSE within the second phase of the strategic activities, there was a [survey](#) in order to map and scan the fintech ecosystem in the country, along with [a feasibility study on the development of the fintech sector in the country](#), which will be a foundation for developing a national fintech strategy in the next period.

In terms of the activities for consumer protection we should emphasize the draft strategy for financial education and financial inclusion, which is in the final phase of revising and includes number of draft measures for consumer protection. In this domain, several associations from the civil sector have been contacted and a Memorandum of cooperation has been concluded with one of them. In the middle of 2020, the National Bank formed a work group including representatives from different organizational units, which holds regular meetings and in the previous period has carried out activities to improve the information of the banks' customers and analysis of the experiences of certain countries in this area.

There were regular On-Site and Off-Site supervisory activities, preparation and monitoring of the corrective measures based on identified noncompliance and disorder in the operations of banks and savings houses, regular annual meetings with the associations for external revision and the members of banks' managing and supervisory board, banks' PIC⁹⁵

⁹¹ Analysis of the developments in financial companies, pension funds and insurance companies was carried out.

⁹² There were two subcommittees within the Committee, as operational bodies-Subcommittee for systemic risks monitoring and proposing macroprudential measures and Subcommittee for preparation of financial crisis management. In 2020, the Financial Stability Committee held three sessions, while the subcommittees held two regular sessions each.

⁹³ The National Bank, the Ministry of Finance, the Securities and Exchange Commission, the Insurance Supervision Agency, The Agency for Supervision of Fully Funded Pension Insurance (MAPAS) and Deposit Insurance Fund.

⁹⁴ ["Strengthening the institutional capacity of the National Bank in the process of its accession to the ESCB"](#)

⁹⁵ Process of determining the banks' internal capital.

assessment, as well as licensing activities of banks, savings houses, exchange offices and fast money transfer providers.

In order to bring the supervisory practices closer to the EBA directions and the ECB practices, there was further improvement of the internal methodology on the assessment of banks' business models. Therefore, after tests and analysis have been done, the process of developing a tool for analysis of long-term business models sustainability was completed, which would be used in the annual supervisory risk assessment for 2021. This year also, the activities for improvement of the overall risk assessment process continued, along with the strengthening of the institutional capacity for assessment of the process and determining internal liquidity by banks, an activity within the twinning project supported by the EU. The activities led to a development of a supervisory tool for this process assessment, i.e. the National Bank developed an internal methodology consisting principles, directions, pursuing a consistent use of the approach in the supervisory assessment of this process, as well as improving the framework and banks' management of this process.

Regarding the activities for Off-Site monitoring of developments in the systemically important banks, the project which was realized with the cooperation with the experts from the World Bank, and refers to the overall process of assessment of recovery plans, which includes a development of internal methodology for their assessment.

Table 4
Processed applications for issuance of prior approval in 2020

Type of license/approval (banks)	issued	rejected	halted
Approval for acquiring shares in a bank	/	/	1
Approval for start of conduct of financial activity	3		/
Approval for statute amendment	12	/	1
Approval for appointment of a Supervisory Board member	44	/	4
Approval for appointment of a Management Board member	19	/	1
Approval for including a gain in Common Equity Tier 1 Capital	4	/	/
Type of license /approval (savings houses)	issued	rejected	halted
Approval for appointing a manager	1	/	/
Total:	83	0	7

Having in mind the latest situation in terms of the danger of COVID-19 virus spread, the regular On-Site examinations during 2020 were performed by following the recommendations for prevention of the negative impact by the pandemics. Therefore, a total of 9 controls of commercial banks and two controls of providers of fast money transfer were conducted during 2020.

The methodology on risk assessment in On-Site examinations has improved during 2020, by improvement of the internal procedures for individual risks assessment with commercial banks, and making them compliant with the latest amendments of law and bylaw regulation as well as the ECB rules. A methodology on determining the aggregate level of IT risks (PSRA-IT- Process of supervisory risk assessment) with commercial banks was developed within the compliance of the supervisory practices and following the example of the ECB and other EU central banks. The methodology contains general directions for introducing efficient practices in supervisory assessment, emphasizing the IT risk. To meet this goal, the commercial banks received questionnaires and with the analysis and comparison of the answers, an adjustment of the tool used in the process of supervisory assessment of IT risks was made.

The project on **capacity building of non-banking financial institutions** was successfully completed in 2020 with the support of the global program Combating Illicit Financial Flows of the German Corporation for International Cooperation (GIZ), **in relation to the activities for strengthening the framework against money laundering and terrorist financing**. Trainings for money transfer providers and their subagents and for licensed exchange offices were conducted within this project. Part of the trainings was dedicated to the National Risk Assessment results and amendments to the Law on AML/CFT as a result of the harmonization of this Law with the fifth anti-money laundering and financing terrorism Directive. The purpose of such trainings is to raise awareness and capacity of money transfer providers and their subagents and of licensed exchange offices to implement their obligations in this segment of operations.

Strategic objective 3 – Foreign reserves management under the safety and liquidity principles and return-optimization

Due to increased volatility on the international financial market and **in accordance with the changed market conditions**, there was an **active management of the foreign reserves portfolios**, as well as continuous active monitoring and **timely reaction by the National Bank for mitigating the consequences from the risks arising from changed market developments and consequences from the health crisis on the banking sector in developed economies**. For that purpose, analysis was performed for the assessment of the volume of fiscal support and the influences of fiscal measures in the countries where foreign reserves are being invested, the prospects for the following period and the security of the banking system in conditions of premature monetary, fiscal and regulatory easing. Placements to commercial banks were recovered due to the analysis. There were also analysis of the possible consequences from Brexit towards management and investment of foreign reserves, which were a foundation for the future investment decisions on foreign reserves placements. Within the process of foreign reserves investment, in order to use the favorable investment opportunities, **new financial instruments were introduced and actively implemented** (cross-currency repo transactions and swap transactions with gold and Japanese yen).

Strategic objective 4 – Increasing the efficiency of banknotes and coins supplying and processing system and increasing the quality and functionality of currency in circulation⁹⁶

Being the only responsible institution that supplies the banks and cash centers with banknotes and coins, during 2020 the National Bank continued its regular activities. Due to the specific working conditions caused by the health crisis, the efficiency of the established system of cash supply was taken into consideration, as well as timely taking appropriate measures. According to the measures for dealing with the pandemic, **the control of the implementation of cash operations standards and criteria** in banks and cash centers was limited to indirect controls, until safe conditions for implementation of these activities through direct controls are made. In terms of the projects related to software solutions improvement which enable more efficient process implementation, the activities are conducted with the foreseen dynamics⁹⁷. Within its regular activities, the National Bank has followed the demand for cash foreign currency for the needs of the National Bank, the state institutions and the administrative bodies and timely intervenes to adequately meet its needs.

⁹⁶ More details in part VIII-Issuance and management of the banknotes and coins of the Republic of North Macedonia-banknotes department.

⁹⁷ The project on enrichment of the functionality of the application system for cash operations is completed. The introduced project solution enables data download for the banknotes processing machines from the previous period and their correction if needed. New forms of reporting are also enabled on customers' demand, as well as reviews on different level of approach.

The activities for implementation of the standardized training platform for bank and cash centers staff, for authenticity and fitness checking of currency in circulation as well as the establishing of the national training plan were postponed due to the measures for dealing with the pandemics, according to the recommendation from the implemented twinning project "Strengthening the capacities of the system for fight against counterfeiting of EUR". These activities will continue as soon as there are conditions for such trainings involving more attendants.

Strategic objective 5 – Reliable and efficient payment systems operation and development of payment services market

Even in conditions of pandemic, the National Bank has successfully fulfilled its **operational role**, by providing **a reliable and smooth payment systems operation in the country**, processing and settlement of transactions associated with monetary policy implementation and foreign reserves operation and realization of cross-border payments for the institutions. With this approach and the protective measures undertaken for the digital space resilience, the National Bank introduced the best practices typical for modern central banks.

In terms of **the payments systems supervisory role, the payment systems' operators performed their operations smoothly even in extraordinary situations**. This is a result of previously set and tested procedures for ensuring business continuity in accordance with the standards for their operation, given by the National Bank. The payment systems' operation was monitored also in condition of crisis. This activity will continue in the period ahead until the situation linked to the COVID -19 health crisis becomes stable.

The National Bank, within its **catalyst and developing role in the area of payment systems**, was actively involved in finishing the draft proposal on payment services and payment systems, continuing the consulting process with the banking sector and other stakeholders and institutions. To enhance its capacity for this strategic objective, the National Bank held a number of e-trainings in cooperation with the central banks of EU members (Belgium, Romania, Portugal, Slovakia, Germany, Lithuania and Croatia) within **the EU twinning project**, supporting the preparation of a bylaw regulation for implementation of the Law on introducing new payment service providers, primarily from fintech sector, as well as encouraging digital transformation to current payment service providers.

Strategic Objective 6 – Supporting the development of domestic financial markets

The support of the development of domestic financial markets was realized through number of activities, such as: regular monitoring of the inter-banking trade in deposit, trade in foreign assets, as well as secondary market of securities, as well as publishing data and information on the financial market developments on the official web-site. Considering the continuous changes of trends on the foreign exchange market, the regular analysis were upgraded with detailed reviews of the developments in exchange offices and entities, as well as monitoring the foreign exchange position of banks in terms of needs for interventions on foreign exchange market. Therefore, the cooperation with the commercial banks is additionally strengthened, in the area of timely, daily communication on the basis of larger transactions for purchasing and/or sale of foreign currencies to all types of clients. We had professional cooperation with ACI Macedonia- Financial markets association, and in November 2020, the National bank actively participated in this association's annual meeting.

Strategic objective 7 – Promotion and further development of research activity in areas crucial for efficient achievement of the National Bank’s objectives.

The research activity in the area of monetary policy, financial stability and prudent regulation are crucial for efficient achievement of the National Bank’s objectives. Thus, one of the eleven strategic objectives is specifically dedicated to promotion and further development of research activity. Therefore, the National Bank belongs among the central banks which continuously invest in research activity and continuous strengthening of analytical infrastructure in line with the contemporary flows. Researches and analysis represent a base in many decision makings in the National Bank’s daily operation, as well as a pragmatic contribution for appropriate framing of the monetary policy and strengthening of the financial stability and National Bank’s supervisory role. Hence, several activities took place. The working materials related to researches on measuring monetary policy effects by using the FAVAR⁹⁸ approach were completed, as well as the analysis of the monetary policy effects on the inflation rates, characteristic for different income households, the assessment of the balance interest rate, research on the monetary policy efficiency and effectiveness versus macroprudential distribution and the evaluation of the optimal euroization level as well as our economy’s euroization determinants. We investigated the effects of the trade in services on the economic growth, the influence of the capital flows on the domestic investments in selected transitional countries, as well as the effects of the minimum wage increase on the companies’ performance. There was also analysis on the monetary policy challenges in developed countries, the international investment position of the countries from the region, with an emphasize on the Macedonian economy, as well as other analysis necessary in the decision making.

The relation between the real and financial cycles in the Macedonian economy was investigated within the twinning project “Strengthening the institutional capacity of the National Bank in the process of its accession to the European System of Central Banks”, through the application of the dynamic stochastic model of general equilibrium (DSGE) model with partial euroization.⁹⁹ The research based on this model is relevant to the policy makers since it provides thorough analysis of our country’s economic cycle in the last 15 years. Being one of this type, it is a great reference for further researches and analysis of the impact of developments in the financial sector towards the economy. To enhance its transparency, the National Bank has prepared analysis of the level of comprehensibility in its public communication. Several other working papers in the field of macroeconomy¹⁰⁰ are in the phase of preparation.

A short paper on the real estate market was prepared within the research activities on preparation of analytical papers for the needs of **financial stability** which will continue the following year. Two surveys were also conducted: Survey on the new production facilities and Survey on the engagement of the members of Supervisory Boards in banks. We also conducted analysis on the saving in conditions of low interest rates, as well as analysis on financial literacy and financial inclusion.

Green Finance represents an area of research that is becoming more important and is related to the National Bank’s strategic role and perspective, as a socially responsible institution, given the importance and topicality of the green and sustainable growth worldwide.

⁹⁸ FAVAR model - Factor-augmented vector autoregressive (FAVAR) model.

⁹⁹ The paper is entitled “Dynamic stochastic model of general equilibrium (DSGE) with partial euroization: the case of Macedonian economy” It was presented at the [38th Research Club Session](#).

¹⁰⁰ Indications from the survey on credit activity of the excess capital for the EMU countries, compared to the Western Balkan; Analysis of the cohesion and import component of the key sectors in Macedonian economy, by using charts with input and output components; Measuring the credit gap by using the Hodrick-Prescott multivariable filter; Can the low inflation in CESEE be a result of the aging of the workforce; Monetary policy effects through VAR with variable parameters over time.

It will be a feature of some of the researches that will be prepared in the National Bank in the forthcoming period.

The National Bank continued promoting the **research activity** by organizing [the Research Club¹⁰¹](#), where working papers and researches on capital flows and domestic investments, banks' credit analysis, as well as subjects related to labor market were presented. In order to promote the development of scientific thought in our country, as well as promotion of young professionals, the National Bank **awarded the Annual Prize for young researchers** for the fourteenth time in a role within the 20th anniversary of the monetary independence. The awarded paper was presented at the [36th Research Club session](#).

Strategic objective 8 – Providing quality statistical data, fully consistent with international and European statistical standards, taking into account the reporting burden and their effective, timely and easy dissemination to users

Statistical data in the area of monetary and external statistics were continuously collected, prepared and published during 2020. At the same time, we actively worked on further development and upgrade in specific segments throughout the year, related to dissemination of statistical data and their methodological expansions. It is particularly important that the **negative shock caused by the COVID-19 pandemic had no impact on the quality and continuity of the preparation process, and by that, on the dissemination of the National Bank's statistical data**. Consequently, data were published according to the publishing Calendar, without delay, and the scope and quality of the sources and data output remained unchanged, compared to the pre-pandemic period.

Despite the specific circumstances, the National Bank enriched its portfolio by publishing financial accounts statistical data and by establishing number of activities for further promotion of communication with statistical data users, which leads to accomplishing the highest statistical requirements and implementation of international principles and rules in statistics. Important activities that marked 2020 in the area of statistics are the following:

- **Data on the annual [financial accounts](#) of Macedonian economy were published in December, 2020 for the first time.** Financial accounts statistics, as an extremely important and at the same time most complex statistics, is an important tool and source of information in the perception of the sectors' financial behavior in the national economy and key channels for obtaining and investing financial assets in the national economy. Financial accounts data, or conditions are published on the National Bank's website, in standardized report charts (time series for the period 2013-2019), on unconsolidated bases. At the same time, methodological explanations and presentation were published and contain detailed information on the definition and classification of institutional sectors and financial instruments, as well as data sources and methods applied in the preparation of financial accounts.
- **Further harmonization of direct investment statistics with the EU requirements**, by submitting new statistical reports to Eurostat, according to previously defined detailed data structure. The improvement is shown in reports on direct investments income, where data are presented by countries and activities, as well as in reports on direct investments –conditions and developments, by economic and geographic zones.

In the area of **financial accounts statistics**, within the National Bank's twinning project, component 3 "Further alignment of NBRNM's Financial Accounts Statistics with the ECB standards", three technical missions were conducted with experts from the Croatian

¹⁰¹ The Research Club was not active due to the pandemics, but then it continued with the activities virtually.

National Bank and the National Bank of Romania, highlighting the quarterly financial accounts and annual flows, as well as the development of new software system on financial accounts preparation in the NBRNM.

Regular publishing of more detailed data on resident investments in foreign securities in the field of [external statistics](#), started in October 2020. The new data set are cross-presentation of data on portfolio investment by the institutional sector and the country of the non-resident securities issuer, as well as by the institutional sector of the resident holder and institutional sector of the non-resident securities issuer, for a specific group of countries. The cross-presentation of data by the above specifics, significantly increases the analytical value of published data on portfolio investment-assets. In addition, the new data set were submitted to the International Monetary Fund, within the Coordinated Portfolio Investment Survey (CPIS¹⁰²), as part of SDDS Plus. The National Bank has also participated in the IMF's draft project on the first annual exchange of sectoral information on securities issuers, within the CPIS.

In order to implement an effective reporting system for the needs of external statistics, we worked on several **projects on rationalization of the data collection process** (on foreign credit operations and foreign investments) during 2020, by introducing electronic notification, as well as increasing the level of workflow (on the quarterly report of foreign investments).

Number of activities were undertaken in the area of **monetary statistics**, within the long-term project on introduction of integrated reporting system for accounting and supervision purposes ISIDORA, primarily related to improvement of the conceptual solution on credit registry data usage for statistical purposes and its future upgrade for National Bank's overall reporting purposes.

National Bank's inter-institutional collaboration with the Ministry of Finance and the State Statistical Office continued throughout the year, in the area of financial accounts statistics, overdraft and deficit fiscal statistics, as well as joint projects on technical support for further development of various statistical domains. National Bank's participation in the IMF's state statistics project with the MF and SSO is very important, as well as the participation in the SSO's IPA 2017 project on statistics of Foreign trade of services, whose primary objective is to replace the current data source on export and import of services and introduce direct reporting.

The following events on strengthening the transparency and improvement of communication with public, as well as improvement of the cooperation with the regional central banks were held during 2020:

- [The first e-workshop for journalists](#) was held within the project on promoting availability and understanding of the National Bank's press releases, information, data and analysis, aimed at data and press releases on more important developments in other financial institutions (OFI);
- [Regional virtual statistical workshop](#) was initiated and organized by the National Bank, dedicated to challenges in the statistics imposed by the COVID-19 pandemic. Statistics officers from the central banks in the region exchanged current experiences and practices at the workshop, and offered solutions for overcoming the challenges that emerged from the COVID-19 crisis.

¹⁰² Coordinated Portfolio Investment Survey-CPIS, IMF

Strategic Objective 9 – Preparation of the National Bank for joining and membership in the European System of Central Banks

Despite the COVID-19 pandemic, the activities related to the National Bank's strategic goals for adopting the best European practices were proceeded smoothly in the past year. The regular activities over the organization and coordination of the National participation in the preparation of the National Programme for Adoption of the Acquis Communautaire (NPAA), the Economic Reform Programme (ERP), as well as implementation of the Stabilization and Association Agreement (SAA), by participating in two subcommittees. At the same time, the National Bank followed the findings and recommendations from the European Commission Progress Report for the Republic of North Macedonia. Our country **had the best results** in the region in terms of the recommendations by the European Commission from the Economic Reform Programme, for the period May 2019 to January 2020, which referred to reform measures for strengthening the financial stability and new employments.

There were also project activities, despite the regular ones. Within the twinning project "Strengthening the Institutional Capacity of the NBRNM on its accession to ESCB" that started in the last quarter of 2019, after the three-month break (April-June) due to the pandemic outburst, the activities were virtually performed successfully and smoothly. Five meetings of the twinning project Steering Committee were held and 3 editions of the project regular quarterly newsletter were published, through which the realization of the projected activities is being monitored¹⁰³. The project was completed on March 11, 2021 with a [project closing - conference](#), with a presentation of the accomplishments realized within the four project Components- Payment services and systems, banking regulation and supervision, financial accounts statistics and policy analysis.

The activities of the Regional Programme for Western Balkan central banks were also realized virtually. Preparation meeting on the implementation of the bilateral measure with the Croatian national bank, aimed at strengthening the international relations in the National Bank. The length of the programme was prolonged by nine months due to the COVID-19 pandemic and is expected to be completed by December 2021.

Within the statistical cooperation programme, funded by the Multibeneficiary IPA 2017 programme, the National Bank's representatives in cooperation with the State Statistical Office and Eurostat, participated in projects in the area of statistics during 2020. With the short-term technical support Tiaeks, one expert mission was conducted during 2020, in the area of compliance. The bilateral technical cooperation between the National Bank and the rest of the central banks was realized to a lesser extent during the pandemics. However, three projects with the central bank of Turkey, as well as one project with the central bank of Holland and one with the central Bank of Germany through a videoconference, while there were projects on exchange of opinions and knowledge realized online.

Strategic objective 10 – Further improvement of corporate governance, transparency and social responsibility of the institution

The realization of the program activities related to the improvement of corporate governance, transparency and social responsibility includes number of aspects of the National Bank's operations¹⁰⁴.

¹⁰³ The Newsletters are available on the National Bank's website: [Macedonian-Project newsletters \(nbrnm.mk\)](http://macedonian-project-newsletters(nbrnm.mk))

¹⁰⁴ The activities related to internal revision and human resources, as a part of this strategic objective are covered in parts IX and X of the NBRNM annual report.

11.1.Public relations, cooperation with domestic and foreign institutions, publishing

National Bank's activities on increasing **transparency and improving public communication** (media, journalists, business-society, citizens, general and professional public, relevant international organizations) continued in 2020. After the corona crisis outburst, the activities in the area of public communication enhanced additionally as a result of the National Bank's efforts to inform the public through number of communication channels¹⁰⁵ timely, on the manner and measures undertaken by the central bank on fighting against the COVID-19 pandemic, and are within the scope of its activities. Thus, the National Bank has successfully met the challenge and adjusted its activities to the emerging conditions. The communication went smoothly, with increased volume and intensity, given the importance of the central bank's transparent communication with public in conditions of health and economic crisis.

In the area of public relations, aside of the projected regular activities, the National Bank realized number of project activities aimed at approaching and better understanding of the role, function and policies performed by the central bank. Hence, the National Bank has introduced a new practice of organizing theme workshops for journalists covering economic news. This activity was performed through series of e-workshops due to the COVID-19 pandemic, covering current issues that stem from the central banking operation. The first e-workshop in the series, was dedicated to statistics of other financial institutions (OFI).

11.2.Financial education and inclusion

The National Bank, as a socially responsible institution, continued investing in financial education of the population in 2020. Investment in financial education means investing in the realization of one of the legislative objectives- maintaining financial stability. Thus, projects for the adult population were implemented, i.e. there were educational texts from the "Economy for everyone" series, and new videos [from the series of animated videos "In the World of Finances with the National Bank"](#), supported by the European Fund for Southeast Europe (EFSE) were also published. The new videos were generally about the use of credit cards and other contemporary ways of payment, as well as use and protection from risks in e-banking that led to well-informed population amid increased interest for these services in conditions of pandemic and need for health protection.

Regarding the financial education related events, the classical education presentations in the National Bank for elementary school student, were replaced with virtual presentation, due to the corona crisis. In the period between February and June 2020, activities for the ["European Money Quiz"](#) were realized, among which a meeting with the teachers and professors on the preparation of the quiz. The traditional contest for students from elementary and secondary schools marking the World Savings Day was organized in October, where the young population showed great interest. Three virtual presentations –on monetary policy, financial stability and payment systems and services were performed in November, within the "Financial Literacy Days", visited by a great number of citizens who applied to the public call. The first training for trainers who will be engaged to educate the population, which will expand the financial education network and strengthen the effects of dissemination of the knowledge in this area was held in November. This activity has been implemented in cooperation with the civil sector, taking into account the cooperation between financial regulators and civil organizations is extremely important for achieving more visible results.

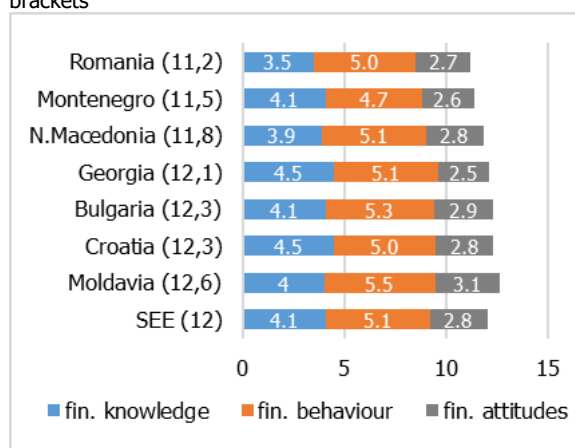
¹⁰⁵ Press releases, statements, addresses, educational materials, including regular posts on its website and social networks.

Within the Technical Assistance Project on financial education by the INFE-OECD from the Ministry of Finance of the Netherlands, [the results of the measurement of the level of adult financial literacy in the region of Southeast Europe in 2019](#) were published.

The population of North Macedonia reached 56% of the maximum (aggregated indicator 11.8 out of which in 2019, 3.9 for financial knowledge, 5.1 for financial behavior and 2.8 for financial attitude). This results are around the average level for Southeast Europe (on aggregated level 12), i.e. 57% out of the maximum, which is lower than the results reached in the EU countries and OECD (64% and 65%, respectively). The results emphasize the need for further efforts in this field, that will become particular measures within the National Strategy on Financial education and financial inclusion, which is in a final phase.

Chart 95

Financial literacy indicators, by component
The total score for the financial literacy is given in the brackets



Source: OECD.

11.3. Museum, Library and Archive

Approach to e-databases, magazines and newspapers was enabled during 2020, for the needs of the employees and their information and implementation of tasks. The National Bank's Library fund was regularly enriched with new titles for which the employees were informed by publishing a Bulletin. The archival material collected from the previous researches was analyzed throughout 2020, since there was no possibility for cooperation with the holders of the materials. With this activity, the application Digital historical archive was completed with the data on established funds. The cooperation with the holders of archival materials, as well as the activities related to numismatic collection and museum education shall continue as soon as the situation goes back to normal.

11.4. Strategy and prevention

During 2020, the **Strategy and Prevention Office**, as a separate independent organizational unit in the National Bank for **second line of defense**, continued performing its functions of strategic planning, operational risk management, business continuity, information system security, protection of personal data and classified information, as well as the compliance in the operations, even in extraordinary conditions. Since the beginning of the global coronavirus crisis, **the National Bank has taken specific measures for health protection of its employees, including the community, as well as measures to mitigate the risk of interruption of work processes due to key staff loss**. For this purpose, the **Business Continuity Plan (BCP) of the National Bank was activated**, with certain adjustments. Namely, complete operability of all work processes was provided, flexible location for implementation of the processes was introduced, the key staff was divided into teams for implementation of the work processes and their allocation on different positions (primary location, back-up location and work from home), as well as adjustment according to the informational equipment and software for work from home. The national Bank has actively

followed the situation with the virus spread¹⁰⁶, the possible operational risks and made decisions for their mitigation. **There was a continuity of all work processes, since the beginning of the crisis until now.**

There were trainings conducted for more than 200 employees in the National Bank during 2020, in order to raise their awareness on the **information system security, protection of personal data and classified information**. The compliance of the operation with the provisions for personal data protection, condition and safety of classified information is regularly controlled, as well as the National Bank's compliance with the mandatory controls provided for Customers Security Controls Framework in the SWIFT¹⁰⁷. Data on the National Bank's compliance with the mandatory controls provided for Customers Security Controls Framework in the SWIFT were timely published in appropriate registry¹⁰⁸.

National Bank's internal acts and bylaws that should be reviewed in terms of compliance were identified, in order to provide compliance with the provisions from the new Law and bylaws on personal data protection. An Action plan on achieving compliance was prepared, according to which, the control of the acts would be over by the end of March 2021, and full compliance with the new Law would be achieved within the legal deadline.

In 2020, the National Bank continued accomplishing its mission and vision based on the Strategic plan for the period 2020-2022¹⁰⁹.

Being one of the biggest global threats, the **Climate changes** have growing importance in the central banks' activities, as socially responsible institutions. Taking this trends into account, the National Bank complemented the Strategic plan for the period 2020-2022¹¹⁰, by including activities for monitoring and managing risks from climate changes, as well as analysis of the impact of risks arising from the climate changes, on the banking system. Thus, the national Bank, as a socially responsible institution will strive to set an example and give contribution towards creating "green" and sustainable economy, which at the bottom line would provide higher living standard and improve the quality of citizens' life. Given the extraordinary conditions in which the National Bank operated throughout 2020, reassessment of the program activities for 2020 was made by individual strategic objectives, whereby no significant discrepancies were noticed in terms of the projections, i.e. most of the program activities are expected to be realized. The work processes and project activities that refer to achieving the strategic objectives were more specifically determined with the plan of activities¹¹¹. In order to effectively realize the projects which are main support for realization of the National Bank's objectives and tasks, the regulation on project management was upgraded by introducing selection criteria and use of agile method in projects for developing software solutions.

Regarding **operational risks** management, a thorough assessment of the exposure of the National Bank's operations to operational risks was made in 2020. There was also a reassessment and evaluation of risks, based on the likelihood and possible consequences amid risk event, and definition of plans with measures for operational risk management, as a prevention from events that could affect achievement of goals, financial result and National

¹⁰⁶ In the period March-December 2020, the National Bank's Crisis Headquarters held 14 sessions.

¹⁰⁷ (CSCF Assessment Template for Mandatory Controls 2020 v3).

¹⁰⁸ KYC Registry Security Attestation.

¹⁰⁹ The preparation, set up and review of the Strategic plan in the context of experiences and practices of other central banks in this field were reassessed in April. There were changes, based on the analysis, in the Rulebook for strategic and operational planning, where instead of annual revision of the strategic plan, a time frame of the National Bank's strategic plan was determined and should be valid for up to three years, and if significant changes occur in the environment during this period, there is a possibility for reassessment i.e. new Strategic plan.

¹¹⁰ [Strategic plan of the National Bank for 2020-2022.](#)

¹¹¹ [Plan of activities for 2021.](#)

Bank's reputation. There were changes in the operational risk management framework for a more active monitoring of the operational risks exposure. Hence, according to the best practices in corporate operations, further activities for improvement of the effectiveness of the operational risk management framework are projected.

The compliance office worked on preparation of compliance regulations and acts for protected internal reporting in the National Bank. It coordinates and is actively involved in the process of preparation of the National Bank's Code of Ethics in compliance with the experiences from the ECB, other European central banks and in compliance with the national regulation. It regularly indicated possible risk of non-compliance of the National bank's draft bylaw and gave legal opinions upon request from the National Bank's management. During the state of emergency in the RNM, there was a necessity for intensified monitoring and regular information of the management and employees on the newly adopted legal decisions, important for the National Bank's operations, for which the compliance office timely informed.

The compliance office conducted revisions of the compliance of operations with regulations and gave recommendations for improvement of operations within their scope. At the same time, it monitored the given recommendations from compliance revisions made previously. It also contributed to the National Bank's process of the operational risks assessment in 2020, particularly in terms of the risks arising from ethical or legal non-compliance.

In terms of improvement and development of the compliance office in the National Bank, there was an expert mission by TAIEKS from the national banks of Slovenia and Austria, on the subject "Strengthening the compliance with the European ethical standards and principles", in November, 2020. Activities for further improvement and development of the compliance office in the National Bank were undertaken in accordance with the recommendations from the technical cooperation.

On the account of the transparency and accountability to the National Bank's Council, on the undertaken activities and operations of the compliance office, as well as the compliance in the National Bank for the period 2019-2020, the compliance office has prepared an Annual report on the compliance within the National Bank which was submitted to the Council.

11.5. Other corporative activities

During 2020, there was a continuous improvement of operations in the area of **accounting records and financial reporting**, therefore draft amendments of the National Bank's accounting policies and guidelines were prepared. Internal acts that regulate the operational planning process were also amended, as well as the acts directly related to the process of financial planning and control. A project was delivered concerning the set-up of the Audit Committee and its harmonization with the international recommendations and best practices for the role and tasks of this body in the central banks. Comparative information on the set-up of the Audit Committee in the central banks, international financial institutions and the National Bank was prepared. Experiences on the manner of conducting inventory of assets and liabilities in number of central banks were perceived, in order to improve the inventory process with the National Bank, after which a new rulebook was adopted.

During 2020, **public procurements** were currently and timely implemented, for the sake of smooth functioning of the National Bank's operations, taking into account the appropriate and effective use of the National Bank's funds. Special attention was paid to transparency, encouraging competition and providing equal treatment to economic operators, as basic principles of this process, prescribed by law. The Annual Public Procurement Plan (APPP) for 2020 was published in the Public Procurement Electronic System. New Manual on procurement implementation in the National Bank was adopted in March 2020, which led to

harmonization with the new Public Procurement Law (Official Gazette 14/19) and bylaws in this field. According to the new guideline on implementation of procurement procedures in the National Bank, internal control mechanisms were strengthened in cooperation with the engaged organizational units, and the manner of implementation of procurement procedures was precisely planned, as exception to the Public Procurement Law. There are clearer directions in the area of planning, in terms of deadlines for the procedures, as well as improvement of the data volume, through which the realization of the plan is monitored. The Annual Public Procurement Plan for 2021 was prepared and adopted at the end of 2020.

Legal support was given constantly, through legal assistance in preparing and discussing laws and bylaws, general and individual legal acts, memorandums of cooperation, protocols, agreements and contracts of the National Bank, as well as consistent legal opinions for individual needs.

The activities for **technical maintenance and physical security**, such as logistical support to other functions of the National Bank, were performed in accordance with the emerging conditions due to the corona crisis. Number of specific measures were undertaken in the area of security and health at work, by giving directions to employees according to the measures and recommendations of the Government and the National Bank's Crisis Committee. The activities for upgrading and improvement of the regulation in the field of security through update, changes and amendments to acts, have already began and are expected to be concluded during 2021.

Strategic objective 11 – Maintaining stable information system and its upgrade in accordance with the existing capacities and international standards.

In a year of extraordinary working conditions, the National Bank has undertaken all the necessary activities for maintaining stable information system, which ensured a high degree of availability of information systems, which enabled smooth functioning and regular implementation of the work tasks within all organizational units in the National Bank. With the outburst of the coronavirus in the country at the beginning of 2020, the National Bank has faced a real challenge to enable work from home for most of the employees¹¹² in a relatively short notice, as a new way of work, introduced after the pandemic outburst. A new service was introduced: teleconference rooms, in order to have smooth operation and at the same time taking into account the employees' health protection. Since the meetings were held online, the contacts reduced. There was a necessity for urgent and unplanned change in some of the existing applications for their adjustment towards the measures for overcoming the corona crisis (such as extension of installment payments), which was successfully realized and in a relatively short term. The National Bank worked on projects for **software development** and also besides the regular extraordinary activities due to the health crisis, it **continued with the improvement of SWIFT infrastructure**, in accordance with the SWIFT recommendations and regular annual maintenances. Regarding the maintenance of a high level of information security, **the National Bank continued with the activities for the IT system security test**, whereby there was no possibility for an external attack detected. The internal controls, which provide strengthening of the bank's security and system's vulnerability check through automated tool, also continued.

¹¹² Over 300 employees, i.e. over 68.2% have a possibility to work from home having access of the necessary applications for smooth implementation of tasks.