



NATIONAL BANK OF KAZAKHSTAN

ANNUAL REPORT 2021



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ANNUAL PERFORMANCE REVIEW

1. Given the pro-inflationary pressure caused by the COVID-19 pandemic and the resulting imbalance in food markets, disruption of supply chains, higher prices for raw materials and transport costs, during 2021 the monetary policy had been tightening. As of end-2021, the overall increase in the base rate summed up to 0.75 pp (from 9% to 9.75%).

In 2021 the Government of the Republic of Kazakhstan, jointly with the National Bank, developed the Comprehensive set of measures to control and reduce the inflation rate for 2022–2024.

As of end-2021, inflation was at 8.4%, and Kazakhstan's GDP increased by 4.0% in annual terms.

2. In 2021, the current account deficit on the balance of payments amounted to 5.7 billion US dollars (in 2020 – 6.6 billion US dollars). The negative current account balance is associated with the increase in returns payable to foreign direct investors. During 2021 the balance of trade surplus doubled from 10.3 billion US dollars (in 2020) to 20.7 billion US dollars. The rise in surplus was driven by the growing exports of goods.

In 2021, a net capital inflow on foreign direct investments amounted to 1.7 billion US dollars (5.8 billion US dollars in 2020).

The external debt of the Republic of Kazakhstan during 2021 went up by 0.5 billion US dollars and amounted to 165.1 billion US dollars, or 86.3% of GDP.

3. The situation in the foreign exchange market in 2021 was developing under the influence of both external and internal factors: the dynamics of oil prices, policies pursued by central banks of developing countries and the inflow of non-residents into government securities of the Republic of Kazakhstan. In 2021, the exchange rate was moving within the range of 414.77 – 436.35 tenge per one US dollar.
4. Gross gold and foreign exchange reserves of the National Bank as of end-2021 amounted to 34.4 billion US dollars. The total market value of the National Fund's portfolio as of end-2021 reached 59.5 billion US dollars.
5. As of end-2021, the overall volume of pension assets of the Unified Accumulative Pension Fund under fiduciary management of the National Bank reached 13.0 trillion tenge, having increased by 1.2% during 2021 due to early withdrawals.

The return on pension assets distributed to the accounts of contributors (recipients) of the Unified Accumulative Pension Fund in 2021 accounted for 11.1%, given the inflation of 8.4%. In real terms, the rate of return accounted for 2.7%.

6. Deposits of residents in depository organizations went up by 22.7%, amounting to 27.1 trillion tenge. Over the year, deposits in the national currency had increased by 25.1% and reached 17.3 trillion tenge, and foreign currency deposits grew by 18.6% reaching 9.8 trillion tenge. As of end-2021, the deposit dollarization went down to 36.0%.
7. As of end-2021, the volume of bank credits to the economy went up by 26.5%, to 18.5 trillion tenge. During 2021, loans in the national currency increased by 30.3% to 16.6 trillion tenge, and foreign currency loans – by 0.7% to 1.9 trillion tenge. As a result, the relative share of loans in tenge within the overall lending volume increased from 87.0% to 89.7%. In 2021, the long-term lending grew by 28.3%, to 16.0 trillion tenge, and short-term lending – by 15.9%, to 2.5 trillion tenge.

8. In 2021 59.3 million transactions totaling 782.1 trillion tenge were processed through the interbank system of money transfers and the interbank clearing system.

In 2021 non-cash operations via payment cards showed a 2.2-time growth in terms of quantity and a 2.1 time growth in terms of volume, amounting to 6.3 billion transactions of 73.1 trillion tenge. The percentage of non-cash operations in the overall structure of payments with the use of payment cards accounted for 96% in terms of quantity of transactions and for 78% in terms of volume.

9. As of end-2021, the amount of cash in circulation amounted to 3.5 trillion tenge, which exceeded its amount at the beginning of 2021 by 201.3 billion tenge or by 6.2% (3.3 trillion tenge).
10. In 2021 the National Bank was making efforts to increase efficiency of its operations based on the National Bank's strategic priorities and international practice, by means include, among others, designing an optimal and dynamic organizational structure of the National Bank and creating conditions for human capital building.

The National Bank approved the system of key performance indicators, which is aimed at effective planning and organization of the National Bank's activities, attaining its strategic goals and providing staff incentives depending on the results they achieve.

11. In 2021, for the first time the National Bank had designed and published the Research Program for 2021–2022, where it set out the medium-term guidelines for top-priority studies of the National Bank in the field of macroeconomic policy and development of the financial market.

The grant program was launched to conduct research in order to mobilize the scientific potential of the academic community as well as to increase public awareness about the areas of the National Bank's activities.

THE NATIONAL BANK'S GOALS AND OBJECTIVES

The National Bank – the central bank of the Republic of Kazakhstan – represents the upper (first) tier of the country's banking system.

The National Bank's goal is to ensure the price stability. In broad terms, its mission is to improve the people's well-being in Kazakhstan through ensuring a low inflation rate and the financial system stability.

Under the laws, the National Bank's objectives are as follows:

- ▶ formulating and implementing the country's monetary policy;
- ▶ ensuring the functioning of payment systems;
- ▶ carrying out currency exchange regulation and currency control;
- ▶ promoting the financial system stability;

- ▶ carrying out statistical activities in the field of monetary statistics, financial market statistics and the external sector statistics.

In 2021, the Monetary Policy Committee was established¹, which is the third governance body of the National Bank along with the Management Board and the Board of Directors.

The Law of the Republic of Kazakhstan specified the powers and composition of the Monetary Policy Committee. Thus, the Monetary Policy Committee is authorized to make decisions on:

- 1) the base rate;
- 2) interest rates on key monetary policy operations;
- 3) other matters outside the scope of the National Bank's Management Board.

¹ The Law of the Republic of Kazakhstan dated January 2, 2021 "On Amendments to some legislative acts of the Republic of Kazakhstan related to the economic growth recovery" made amendments to the Law of the Republic of Kazakhstan dated March 30, 1995 "On the National Bank of the Republic of Kazakhstan"



SECTION 1.

**ECONOMIC CONDITIONS
FOR DEVELOPMENT
AND KEY MEASURES OF
THE NATIONAL BANK**



1.1 EXTERNAL CONDITIONS

For the second year in a row, the global economy has been affected by the COVID-19 pandemic. During 2021, the epidemiological situation was developing cyclically. Several new strains have emerged as a result of the virus mutation. During the year, the total number of coronavirus incidences worldwide increased from 85 million to 287 million people, and the number of deaths went up from 1.9 million to 5.4 million people. In order to combat the infection, countries created vaccines, which subsequently improved the epidemiological situation by increasing the number of those vaccinated in developed countries to 70-80% of the total population, and in developing countries – to 20-30%.

However, in comparison with the crisis year of 2020, in 2021, many countries managed to quickly restore production volumes and show strong economic growth. According to the IMF's preliminary assessment, as of end-2021, the global economy increased by 5.9% (in 2020 – a 3.1% decline). At the same time, the growth rates of developed economies reached 5.0% (in 2020 – a 4.5% decline), and of developing countries – 6.5% (in 2020 – a 2.0% decline).

A rapid rise of energy prices appeared to be one of the most critical problems. Thus, world prices of Brent oil had gone up by 69.3% over the year. World prices of copper had increased by 50.9% over the year, and aluminum prices – by 45.5%; the rise in prices of zinc was 32.6%, and of lead – 20.7%. World prices of coal increased nearly by 2.3 times and reached 138 US dollars per ton.

Global food markets also demonstrated price hikes because of the reduced supply due to bad weather conditions, measures of price control introduced by countries, and increased prices for fertilizers. The FAO Food Price Index had risen by 28.2% over the year. At the same time, the fastest price growth was shown by oilseeds (by 65.8%), sugar (by 37.5%), and cereals (by 27.2%). Prices for meat and dairy products increased by 12.9% and 17.0%, respectively.

Due to the resulting imbalance between the demand and supply and a concurrent rise in world energy prices and food prices, inflationary pressure increased significantly.

According to the EU statistics authority, consumer inflation in the EU, with a target of 2.0%, in December 2021

rose to a maximum of 5.3% for the first time since 1997. In Germany, Europe's main economy, inflation accelerated to 5.7%. In France and Italy, inflation reached 3.4% and 4.2%, respectively. In some Eastern European countries, inflation has exceeded 10% or is close to this level (Estonia – 12.0%, Lithuania – 10.7%, Poland – 8.0%).

In the USA, where the inflation target is also 2.0%, inflation accelerated to the maximum for the last 40 years and in December 2021 accounted for 7.1% in annual terms. Within the structure of inflation in the EU countries and the USA, energy carriers make the main contribution to the rise in prices, where the annual price growth reached almost 30% by the year-end. A surge in prices was also demonstrated by prices for cars and house rent.

In Russia, with its 4.0% target, inflation increased to 8.4% in December 2021. In contrast to developed countries, in Russia, just as in many other developing countries, the food component showed soaring growth, while a rise in energy prices seemed to be less significant.

High energy prices and problems with supply chains have also driven up industrial inflation worldwide. In December 2021, the producer price index in the EU increased by 26.3% compared to the corresponding period of the last year, in China – by 10.3%, and in the USA – by 10.0%.

Due to the increased inflationary background, the central banks of developing countries began to revise their policy rates upwards. For example, during 2021, Brazil raised the rate from 2.0% to 9.25% by the end of the year, and Russia – from 4.25% to 8.5%. Several central banks in developed countries have also entered a cycle of rate hikes. Such countries include South Korea, Norway, Great Britain, Iceland, Czech Republic and New Zealand. A total of 38 central banks have raised interest rates in 2021.

In order to support the economic activity in the country, during 2021 the US Federal Reserve generally pursued a soft monetary policy. The policy rate remained close to zero. Meanwhile, by the end of 2021, due to the increased inflationary risks and stabilization in the labor market, the US Fed's rhetoric began to tighten. A curtailment of stimulus measures and a gradual transition to a neutral monetary policy in 2022 was announced.



The US Fed's actions as well as the increased risks of further development of the world economy increased volatility in the global foreign exchange market. As a result, the US dollar index (DXY) grew from 90 points to 95.8 points by the end of 2021. The European currency depreciated against the US dollar by 3.7%, and the Russian ruble – by 1.9%.

Since Kazakhstan's economy is an open economy, the changes taking place in external markets have an impact on the domestic economy and the pricing environment. Over the past year, inflationary risks have significantly increased both from heightened inflation in Kazakhstan's trading partner countries and from

higher prices in the global food markets. Risks from external monetary conditions have intensified due to the measures taken by large central banks to gradually move towards a neutral monetary policy.

Despite some deterioration in the risk profile for Kazakhstan's economy, there were also positive developments. One of them was a significant rise in prices for exported products, namely crude oil, metals and wheat. In addition, the growth rates of the economies of Kazakhstan's trading partners, despite the COVID-19 pandemic and other risks, turned out to be rather high, exerting a positive effect on the country's exports.

1.2 DOMESTIC TRENDS

1.2.1 INFLATION

According to the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, the annual inflation in Kazakhstan accounted for 8.4% as of end-2021 (in 2020 – 7.5%).

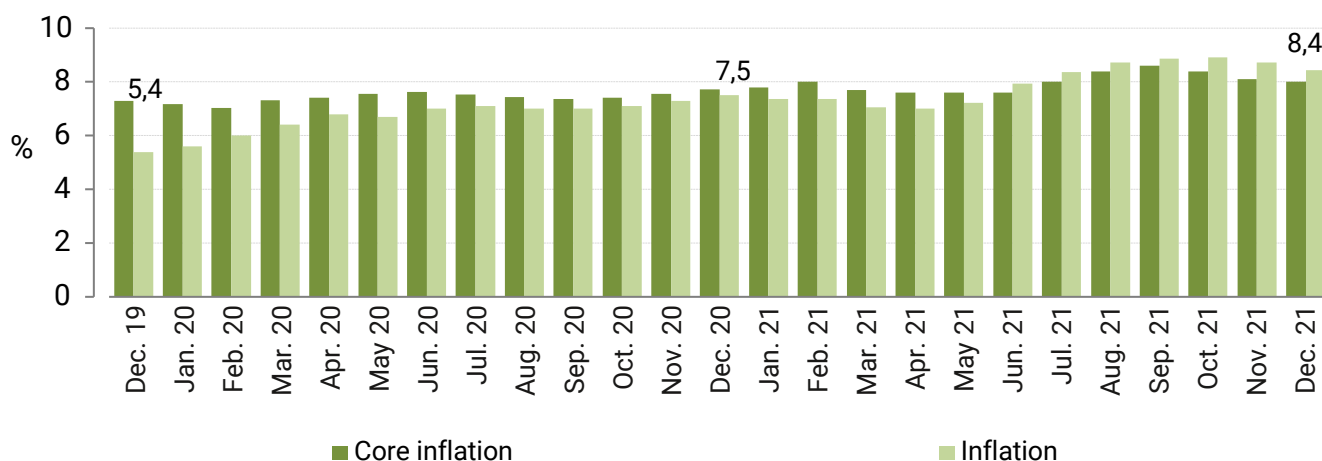
From June 2021, given a significant growth in prices for fruits and vegetables, annual inflation rates exceeded annual rates of the core inflation (Figure 1.2.1.1).

In the inflation structure, foodstuffs appreciated in terms of price by 9.9% (in 2020 – by 11.3%), non-food

products – by 8.5% (5.5%), and paid services – by 6.5% (4.2%).

After the lengthy acceleration that was observed earlier, the annual food price growth began to slow down by the end of 2021. A significant contribution to deceleration of food inflation was driven by disinflation of sunflower oil, sugar, eggs and vegetables given the stabilization of the monthly price growth and the removal of the abnormally high values of 2020 from the calculation of annual inflation. At the same time, due to the appreciation in the cost of forage crops caused by a lower grain yield, prices for meat and bakery products were growing.

Figure 1.2.1.1 Dynamics of inflation as % of the corresponding period of the preceding year



Source: ASPR BNS

The rise in prices of vegetable oil observed in 2021 was a worldwide trend caused by the reduction of supply in the global market resulting from a poor harvest in the 2020–2021 season. Moreover, given the appreciation in prices of raw materials, domestic producer prices also increased.

In June 2021, with the of depletion of domestic stocks before the arrival of a new crop, a sharp increase in prices of vegetables, in particular, made a significant pro-inflationary contribution for long-term storage vegetables (potatoes, carrots, beets).

Additional pro-inflationary pressure on the domestic pricing of food products in 2021 was exerted by the rise in world food prices. Thus, in 2021, due to the increased demand and weak supply caused by a low harvest, the FAO food price index growth accounted for 28.2%.

The main contribution to acceleration of the non-food inflation component in 2021 was made by the appreciation in prices of fuel and lubricants, especially diesel fuel, and solid fuel and cars.

The rise in fuel prices is associated with rising costs and the recovery of economic activity. High exports also exerted additional pressure on the price of fuel, resulting in a shortage of raw materials in the domestic market. It should be noted that the increase in the cost of fuel and lubricants puts additional upward pressure on the dynamics of inflationary processes, which manifests itself both directly and indirectly through the rise in prices for those goods and services where fuel and lubricants are used in the production and logistics.

Appreciation in the price of coal is caused by the rising producer prices given the increase in prices for electricity, fuel and lubricants, the growing wages as well as a higher cost of the PPE maintenance.

With the growing import prices and producer prices, prices of cars were also increasing.

Acceleration of annual growth rates of paid services in 2021 is related to the increase in prices of regulated utility services and certain regulated services due to the recovering demand.

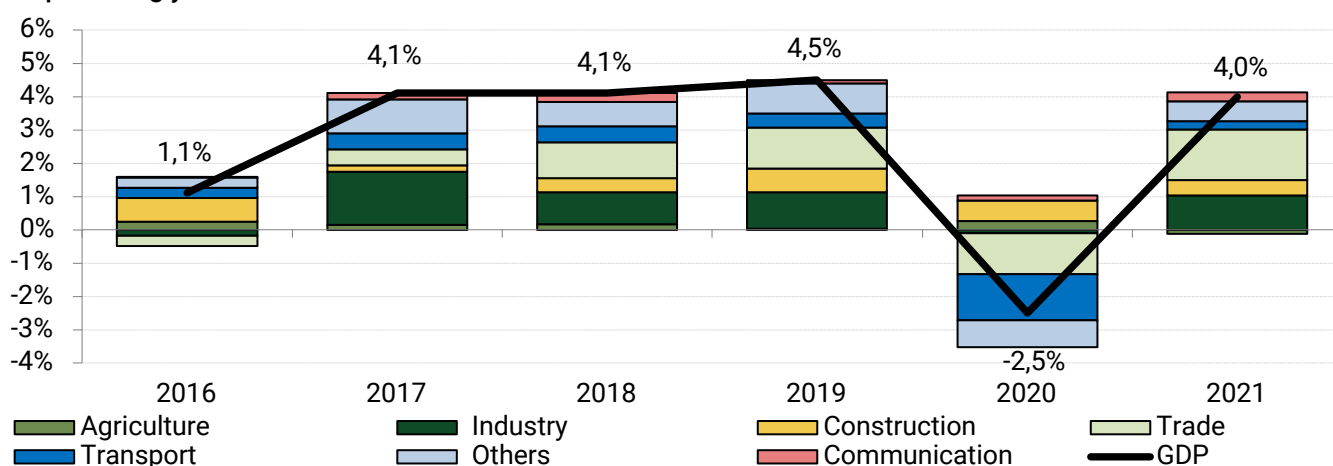
In 2021, with the rise in real estate prices as well as the increased demand for rental housing by university students against a limited number of rooms in student hostels caused by the quarantine restrictions, the cost of house rent also went up.

1.2.2 REAL SECTOR OF THE ECONOMY

In 2021, the economic activity of Kazakhstan has been recovering owing to the increasing world prices in the raw commodity markets and easing quarantine restrictions.

According to the latest data from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, in 2021 Kazakhstan's GDP grew to 81.3 trillion tenge in current prices, having increased by 4.0% in real terms compared to 2020 (Figure 1.2.2.1).

Figure 1.2.2.1 Contribution by the economic sectors to the real GDP growth as % of the corresponding period of the preceding year



Source: ASPR BNS

High growth rates were demonstrated by such sectors as the manufacturing industry, trade, transport, construction, information and communication, and the public sector.

During 2021, the industry grew by 3.8% due to the growth in the mining industry by 1.7% and the manufacturing industry by 5.5%. A positive contribution to the growth in the mining industry was made by the increased output of metal ores (a 4.2% growth), namely, iron ore (by 2.1%) and ores of non-ferrous metals (by 4.6%). At the same time, after curtailment of production volumes of crude oil and gas condensate in the first half of 2021 caused by compliance with limitations as part of the OPEC+ agreement on daily production, by the end of the year the output of crude oil and gas condensate recovered and grew by 0.2% in annual terms.

A 5.5% growth was observed in the manufacturing industry, which was driven by a 1.9% increase in food production, a ramp-up in the production of coke and refined products – by 6.7%, other non-metal mineral products – by 9.8%, beverages – by 16.1% and machine building – by 20.4%. A negative contribution was made by a 0.2% reduction in the metallurgical industry as a result of decreased production of base precious metals and non-ferrous metals by 1.6%.

As of end-2021, volumes of wholesale and retail trade went up by 9.2% in annual terms. The ramp-up of the sector was driven by an uplift in volumes of wholesale and retail sales by 10.5% and 6.5%, respectively. The increase in wholesale turnover was caused by the upturn in wholesale realization of non-food products. The growth of wholesale turnover is associated with expansion of consumer demand as a consequence of eased quarantine restrictions, with the increasing real money income of the population and the consumer lending.

Given the growing mineral production and the positive dynamics in trade, the growth of transport and warehousing services in 2021 accounted for 3.6% in annual terms. The main contribution to the sector development was made by the increase in volumes of freight turnover in the pipeline and air transport.

Implementation of government housing programs and infrastructure projects has become a significant factor for the growth in the volume of construction works in 2021 (a 7.6% increase). A positive contribution to the growth was made by a continuing construction of affordable housing and the country's transport and logistics infrastructure (construction of highways, roads, railways, bridges and tunnels) as part of such government

programs as “Nurly Zher”, “Bakytty Otbasyy”, “7-20-25”, “5-20-25”, “Employment Roadmap for 2020–2021”.

With the rising demand for remote work and online learning, communication services showed the positive dynamics, and the growth accounted for 12.9%. The main contribution to the growth of the industry is made by the expansion of Internet services, mobile communication and data transmission services via telecommunications networks.

A negative contribution to the GDP growth was made by the reduced gross agricultural output (a 2.4% decline), which was due to a lower plant production (by 6.7%) caused by a decrease in grain crop yields. The growth in animal production accounted for 3.6%.

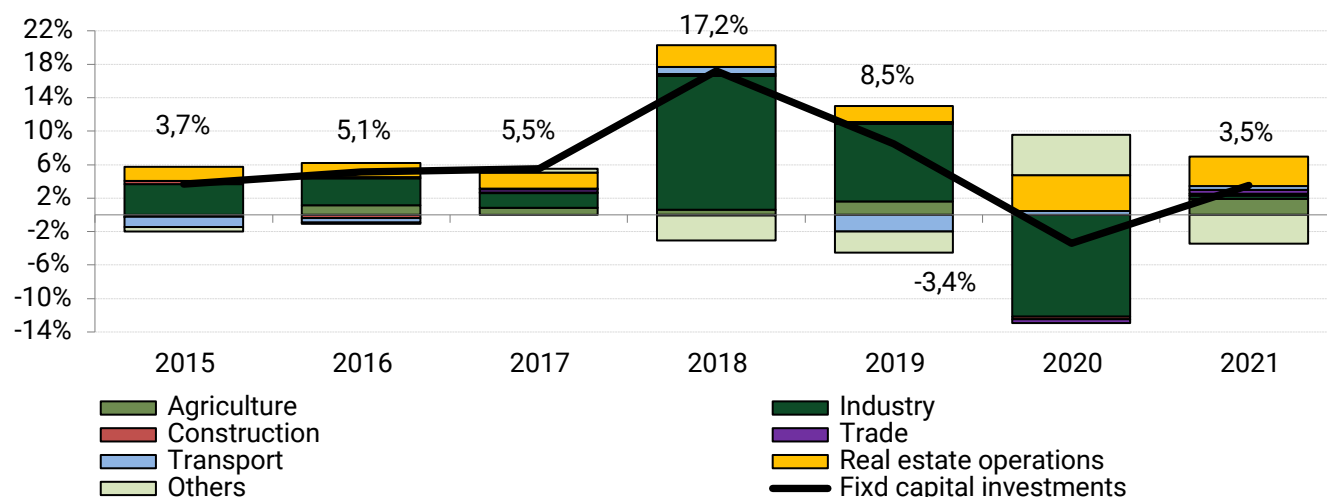
The domestic demand dynamics in 2021, due to realization of pent-up demand and the easing of restrictive measures in the country, was of a recovering nature. As of end-2021, the real consumption of households increased by 5.1%. The volume of consumer demand in 2021 reached the pre-pandemic level.

The household demand was supported by high dynamics of consumer lending and positive dynamics of real income of the population (a 5.1% increase in 2021) due to the growing real wages in the economy and the recovery of income from self-employment.

Gross formation as of end-2021 had not virtually changed compared to 2020 (a 0.5% growth). At the same time, in the structure of gross formation, a positive trend is observed in fixed capital formation. Fixed capital formation in the 2nd quarter of 2021 entered the growth zone as a result of gradual recovery of investments in the mining industry and the positive dynamics of investments in key sectors of the economy (Figure 1.2.2.2).

In 2021, given the recovering price dynamics in the global commodity markets, a revival of economic activity in trading partner countries and gradual adaptation to occasional outbreaks of COVID-19, external demand for Kazakhstani export products gradually recovered. In addition, production of ferrous and non-ferrous metals increased, and monthly volumes of oil and gas condensate production recovered their growth owing to a gradual easing of OPEC + restrictions. As a result, the rate of decline in exports in the first 9 months of 2021 slowed down to 1.6% (a 12.1% decline in 2020). At the same time, as of end-2021, because of significant acceleration in the 4th quarter of 2021 (a 12.2% growth), the dynamics of real exports entered the growth zone.

Figure 1.2.2.2 Contribution by economic sectors to fixed capital investments as % of the corresponding period of the preceding year



Source: ASPR BNS

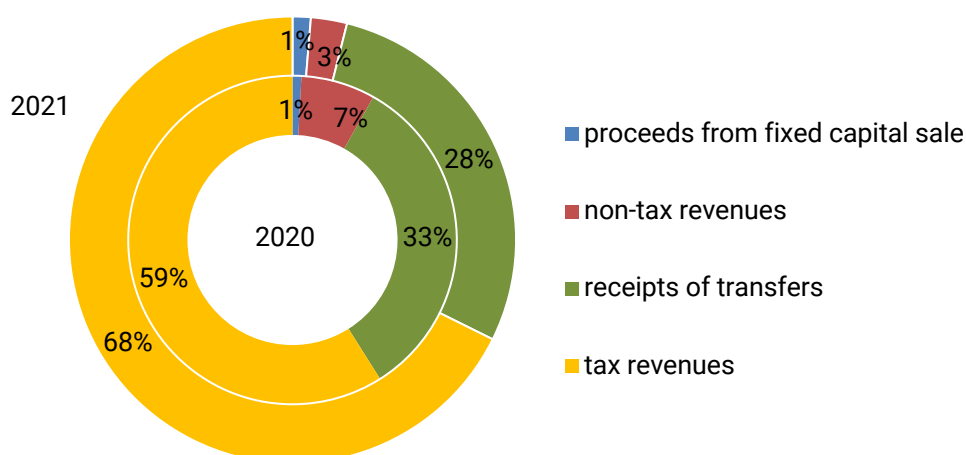
1.2.3 FISCAL POLICY

Kazakhstan's fiscal policy in 2021 was characterized by the increased budget spending on social welfare and social security (raising retirement benefits, scholarships, and allowances), healthcare, education and defense as

part of continued fight with the COVID-19 pandemic's aftermath.

As of end-2021, about two thirds of the state budget revenues were composed of tax revenues (68%) and nearly one-third (28%) consisted of transfers (Figure 1.2.3.1).

Figure 1.2.3.1 Structure of state budget revenues, as % of total revenues



In 2021, the following types of taxes accounted for the largest shares in the structure of tax revenues: value added tax (26%), corporate income tax (26%), and personal income tax (11%).

Compared to 2020, tax revenues to the country's budget increased by 25.3%. Within the structure of taxes, receipts from value-added tax showed the largest

growth of 10.9% (due to the ramp-up in production of goods by 3.5% and services by 3.9% in the main sectors of the economy), tax on international trade and foreign operations rose by 59.7% (as a result of rising world prices of oil and an increase in the floating rate of export customs duties for crude oil), as well as from excise taxes – by 8.3% (due to an increase in the excise rate for tobacco products and alcohol products). The volume of

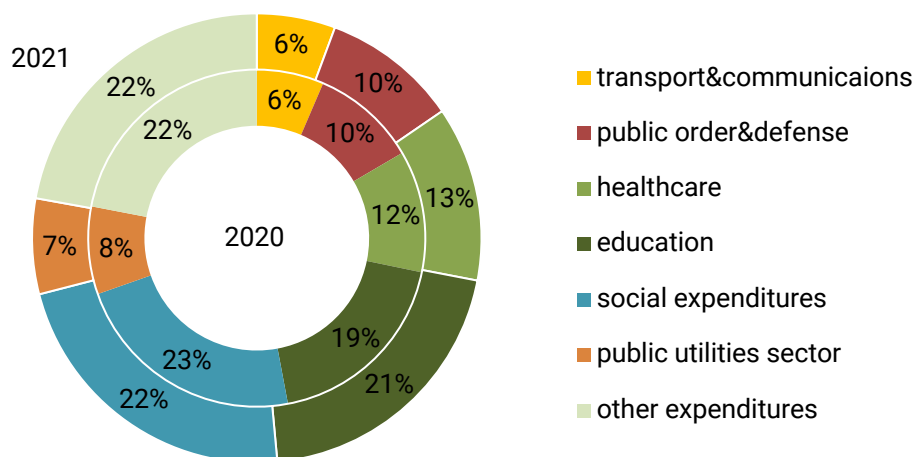
receipts from corporate income tax went up by 38.4%, from personal income tax – by 22.0%, and social tax – by 15.7%.

Receipts of transfers from the National Fund to the budget decreased by 5.7% – from 4.8 trillion tenge in 2020 to 4.5 trillion tenge in 2021.

State budget expenditures in 2021 increased by 7.3% compared to 2020. Expenditures for social welfare and social security went up by 6.7% (due to the indexation

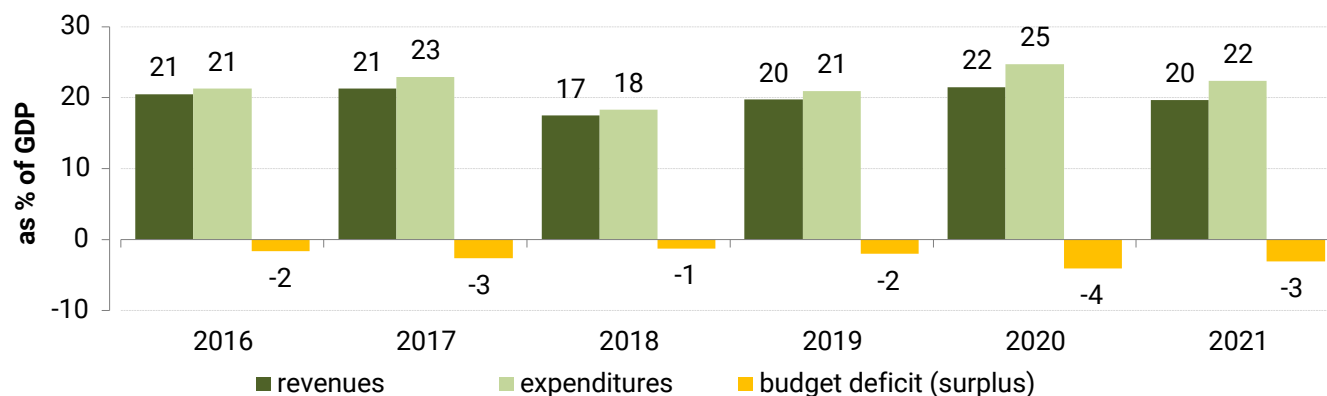
of retirement benefits, allowances and targeted social support), defense – by 10.9% (in connection with ensuring the combat and mobilization preparedness of the Armed Forces), healthcare – by 15.5% (owing to the raise of salaries to the medical staff and the implementation of anti-epidemiological measures taken to fight the spread of coronavirus), education – by 17.2% (due to the increase in the salaries of teachers) (Figure 1.2.3.2). At the same time, expenditures on transport and communications and utility services decreased by 5.8% and 12.3%, respectively.

Figure 1.2.3.2 Structure of the state budget expenditures, as % of total expenditures



The state budget deficit as of end-2021 amounted to 2.5 trillion tenge, or 3.1 % of GDP (Figure 1.2.3.3).

Figure 1.2.3.3 State budget execution



In 2021, receipts to the National Fund (excluding investment return) exceeded those of 2020 by 86.5%. This was driven by the 86.0% growth in receipts of direct taxes from the oil sector enterprises (except taxes charged to the local budget). Such increase was mainly due to the growing receipts from corporate income tax (by 125.5%) and the share of the Republic of Kazakhstan in the production sharing under the concluded contracts

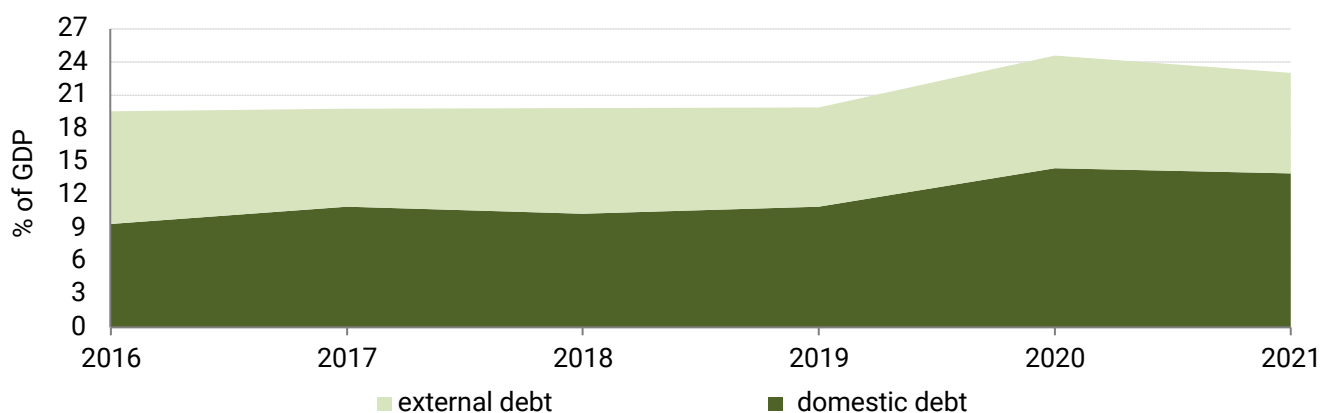
(by 87.2%). Besides, receipts from the mineral production tax and rent tax on exported crude oil also went up by 32.4% and 149.4%, respectively.

At the end of 2021, external government debt amounted to 7.4 trillion tenge (17.1 billion US dollars), or 9.1% of GDP, having increased by 7.3% compared to 2020 (Figure 1.2.3.4). In the total amount of external debt

of the Government of the Republic of Kazakhstan, the major portion was represented by the Eurobonds – 52.4% as well as foreign loans of the International Bank for Reconstruction and Development – 19.7% and Asian Development Bank – 12.3%. The domestic debt

of the Government of the Republic of Kazakhstan went up by 16.1% because of a 25.7% growth in long-term treasury obligations and at end-year 2021 amounted to 11.3 trillion tenge, or 13.9% of GDP.

Figure 1.2.3.4 Government debt of the Republic of Kazakhstan



1.2.4 BALANCE OF PAYMENTS AND EXTERNAL DEBT

At the end of 2021, the current account was in deficit and amounted to 5.7 billion US dollars (in 2020, the current account deficit was 6.6 billion US dollars). The negative current account balance is associated with increased income payable to foreign investors (Appendix 1 to Section 1.2.4, Table 1.2.4.1).

The balance of trade surplus doubled to 20.7 billion US dollars. The increase in surplus was caused by the growing exports of goods.

During 2021, world prices of Brent oil stood at 70.7 US dollar per barrel on average, having increased by 69.3% versus 2020 (42.3 US dollars per barrel on average in 2020). Exports of goods increased by 27.5% versus 2020 and amounted to 60.3 billion US dollars. The cost of exports of oil and gas condensate (51.5% of official exports) went up by 31.2%, or by 7.4 billion US dollars, which is associated with a 40.9% rise in contractual prices. Exports of non-ferrous metals grew by 56.0%, exports of non-ferrous metals grew by 25.1%. Exports of cereals increased by 21.5%.

Imports of goods expanded by 7.1% and amounted to 39.7 billion US dollars. The increase in imports of goods was driven by the growing supplies of consumer goods by 21.1%, or by 2.2 billion US dollars, where imports of non-food products grew by 23.6%, or by 1.7 billion US dollars, and imports of foodstuffs – by 15.3%, or by 0.4 billion US dollars.

The deficit in the balance of international services decreased by 40.6% and amounted to 1.9 billion US dollars. The decline in the balance of international services is related to a 6.1% reduction in the imports of services. The foreign trade turnover on international services increased by 2.0% and made up 13.5 billion US dollars.

The deficit in the balance on primary income went up by 60.5% compared to 2020 and equaled 24.2 billion US dollars. The deficit increased because of the growing returns of foreign direct investors.

Income of residents on their investments went up by 5.4% versus 2020, amounting to 2.0 billion US dollars. About a half of such incomes falls on revenues from the country's official reserves (reserve assets and foreign assets of the National Fund), which contracted by 3.7% to 934 million US dollars.

Investment income payable to foreign investors went up by 55.5% and equaled 25.3 billion US dollars, where incomes of non-residents on direct investments increased by 62.1% from 14.1 billion US dollars in 2020 to 22.8 billion US dollars in 2021. Within the overall amount of investment incomes payable, 77.6% falls on returns from equity participation in the form of retained earnings (and dividends) or in the form of the share of foreign direct investors in retained profit (or loss) of Kazakhstani enterprises (the so-called reinvestments). Payouts of interest to creditors who are not in direct investment relationship increased by 12.4% and amounted to 2.4 billion US dollars.

The net inflow on the financial account (excluding reserve assets) in 2021 amounted to 3.0 billion US dollars (in 2020 – 14.8 billion US dollars). A larger buildup in liabilities of residents compared to the growth in their assets secured a net capital inflow on financial operations or “net borrowing from the rest of the world”.

The gross inflow of foreign direct investments (negative balance) in 2021 amounted to 1.7 billion US dollars (5.8 billion US dollars in 2020); operations on foreign direct investments are related to financing of foreign affiliated companies by Kazakhstani enterprises.

The rise in liabilities on foreign direct investments amounted to 4.4 billion US dollars. The increase in liabilities of residents on foreign direct investments was secured by the reinvestment of returns of non-residents (retained profit of direct investors). Reduction in debt obligations to foreign affiliated entities has partially offset the increase in liabilities on foreign direct investments.

The gross inflow of foreign direct investments into Kazakhstan went up by 37.7% and equaled 23.7 billion US dollars. Investments into production of crude oil and natural gas (28.2% of gross inflow foreign direct investments in 2021) increased by 3.5% and amounted to 6.7 billion US dollars. Foreign direct investments into the metallurgical industry (17.6% of the gross inflow of foreign direct investments) grew by 66.4% to 4.2 billion US dollars; investments into wholesale and retail trade, car repair (16.3% of the gross inflow of foreign direct investments) increased by 46.7% to 3.9 billion US dollars, investments into financial and insurance activities (6.8% of the gross inflow of foreign direct investments) went up by 57.2% and equaled 1.6 billion US dollars; investments into transport and warehousing (4.2% of the gross inflow of foreign direct investments) increased by 11.7% to 1.0 billion US dollars.

In the structure of gross inflow of foreign direct investments by countries, the Netherlands are dominating (29.5% of gross receipts of foreign direct investments), followed by the USA (11.8%), Switzerland (11.2%), China (7.8%), Russian Federation (8.0%), United Kingdom (4.3%), Belgium (4.5%), Turkey (2.9%) and the Republic of Korea (South Korea) (3.4%).

The net capital inflow on portfolio investments amounted to 3.3 billion US dollars (8.1 billion US dollars in 2020). The capital inflow was secured by reduction in foreign assets of the National Fund and enterprises of the non-bank sector by 0.9 billion US dollars. The growth in liabilities of residents on portfolio investments of 2.4

billion US dollars is associated with the issuance of the ruble-denominated bonds by the Ministry of Finance of the Republic of Kazakhstan totaling 40 billion rubles, or 0.6 billion US dollars, and with the issuance of Eurobonds of the “Development Bank of Kazakhstan” JSC as well as purchases of the National Bank’s short-term notes and securities of the Ministry of Finance of the Republic of Kazakhstan in the secondary market by non-residents.

Medium- and long-term debt instruments reported under “Other investments” item showed up a net capital inflow of 3.2 billion US dollars (a net inflow of 2.0 billion US dollars in 2020). The inflow was secured by a government loan from the Asian Infrastructure Investment Bank of 661.8 million euro.

The net capital outflow on short-term debt instruments in 2021 amounted to 5.2 billion US dollars (1.1 billion US dollars in 2020). The increase in short-term assets of residents by 8.4 billion US dollars was secured by the growth in assets of banks, the National Fund, Unified Accumulative Pension Fund and Kazakhstani enterprises on foreign accounts. Liabilities of residents went up by 3.3 billion US dollars due to the increase in liabilities on short-term credits and loans of banks and other sectors as well as payables of Kazakhstani enterprises.

Reserve assets (excluding assets of the National Fund) as at January 1, 2022, were estimated at 34.4 billion US dollars, thus covering the financing needs of 8.7 months of Kazakhstani imports of goods and services.

External debt of the Republic of Kazakhstan at the end of 2021 amounted to 165.1 billion US dollars, of which 11.1%, or 18.4 billion US dollars is the public sector’s external debt; 3.3%, or 5.5 billion US dollars – external debt of the sector of “Banks”; 27.3%, or 45.1 billion US dollars – debt of “Other sectors” not related to direct investments; 58.2%, or 96.1 billion US dollars is intercompany debt of this sector (Appendix 2 to Section 1.2.4, Table 1.2.4.2).

During 2021, the country’s external debt expanded by 0.5 billion US dollars (in 2020 – the growth by 5.0 billion US dollars) due to the balance of payments operations (for 2.6 billion US dollars) that were partially offset (by 1.2 billion US dollars) by reduction in the market value of Eurobonds of government and quasi-government issuers and exchange rate revaluation of loans as well as by other non-operational changes (by 0.9 billion US dollars).

During 2021, external debt of the Government of the Republic of Kazakhstan increased by 2.0 billion US

dollars due to the placement by the Ministry of Finance of the Republic of Kazakhstan of ruble-denominated sovereign bonds on the Moscow Stock Exchange and the loan from the Asian Infrastructure Investment Bank borrowed to finance the budget deficit in 2021.

Foreign liabilities of the National Bank increased by 1.2 billion US dollars owing to the receipts of SDRs for 1.1 billion SDR (1.57 billion US dollars) provided by the IMF within the framework of allocations among the IMF member countries.

External debt of "Banks" increased by 0.7 billion US dollars through the issuance of the tenge and US dollar-denominated Eurobonds by the "Development Bank of Kazakhstan" JSC as well as due to the inflow of funds of non-residents to accounts at Kazakh banks.

The recovery of economic activity accompanied by the growth of GDP and exports of goods and services helped improving the relative parameters of external debt: external debt to GDP as of end-2021 accounted for 86.3% (96.2% as of end-2020), and external debt to exports of goods and services was 249.5% (314.3% as of end-2020) (Appendix 3 to Section 1.2.4, Table 1.2.4.3).

Kazakhstan's net external debt at the end of 2021 amounted to 64.9 billion US dollars, having decreased by 1.4 billion US dollars since the beginning of the year. The government sector and the sector of "Banks" were "net creditors" to the rest of the world (30.4 billion US dollars and 2.3 billion US dollars, respectively and "Other sectors" – as a net debtor (97.6 billion US dollars).

1.3 MONETARY POLICY

1.3.1 ENSURING THE PRICE STABILITY: GOALS AND MEASURES

The National Bank's goal is to ensure the price stability in the country. Monetary policy of the National Bank is implemented in accordance with the principles of inflation targeting. The inflation target in 2021 was set at 4-6%.

In the first half of 2021, with the hit of crisis caused by the COVID-19 pandemic and some stabilization of inflation, the National Bank continued pursuing the stimulative monetary policy commenced in 2020. During January-June 2021, four decisions to keep the base rate at 9% were made.

Subsequently, inflationary pressure had been gradually intensifying as a result of rising world food prices and acceleration of inflation in the countries – Kazakhstan's main trading partners. The improving epidemiological situation produced a positive effect on the domestic economy contributing to the recovery of consumer demand; however, a progressive growth of inflationary expectations put an additional pressure on prices.

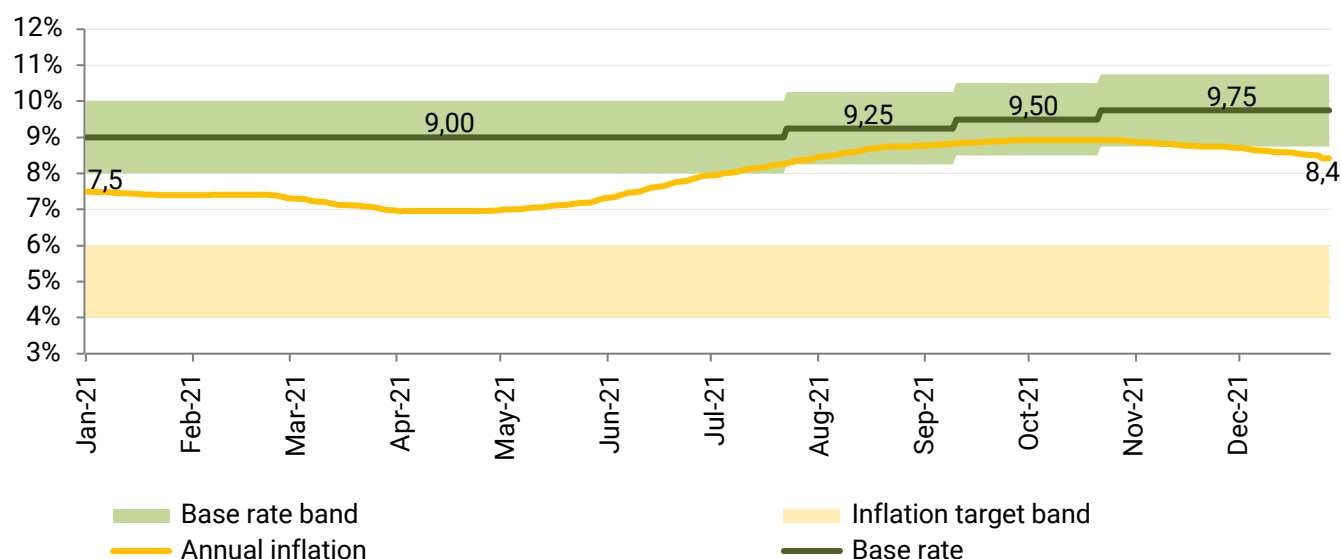
Resulting from external and internal factors, by the end of the first half of 2021, inflationary processes in the country began to accelerate. The annual inflation as of end-of June grew to 7.9% (from 7.2% in May 2021).

In these circumstances, the National Bank started to pursue the disinflationary monetary policy. From July 27, 2021, the base rate was raised to 9.25%.

On September 7, 2021, in line with the instruction of the President of the Republic of Kazakhstan, the Government of the Republic of Kazakhstan, in conjunction with the National Bank, approved the Comprehensive set of measures of anti-inflation response for 2021–2024 ("the Comprehensive set of measures"), which provides for urgent and medium-term measures aimed at stabilization of non-monetary inflation factors in the first instance.

As part of the outlined disinflationary monetary policy, the National Bank made a sequent decision to raise the base rate to 9.5% from September 14, 2021. It was predicated by prevailing pro-inflationary pressure in the economy caused by global inflationary trends of increasing prices for food and raw materials against the recovering global demand, which exceeded the industrial capacity. Such pressure was intensified by internal interseasonal shocks, an actively recovering consumer demand as well as the growing prices of electricity, gas and fuel and lubricants. The pressure was also put by heightened inflationary expectations of the population that reached 8.8% in August 2021.

Figure 1.3.1.1 The base rate path and the annual inflation rate



Given the persisting pro-inflationary pressure in the economy, the annual price growth reached the peak of 8.9% as of the end of September and October 2021. This factor, along with the rise of prices in the global markets, acceleration of inflation in trading partner countries and high inflationary expectations within the country caused a further tightening of monetary conditions. From October 26, 2021, the base rate was raised to 9.75%.

In December 2021, the National Bank left the monetary conditions unchanged. As of end-2021, the overall increase of the base rate was 0.75 pp (from 9% to 9.75%).

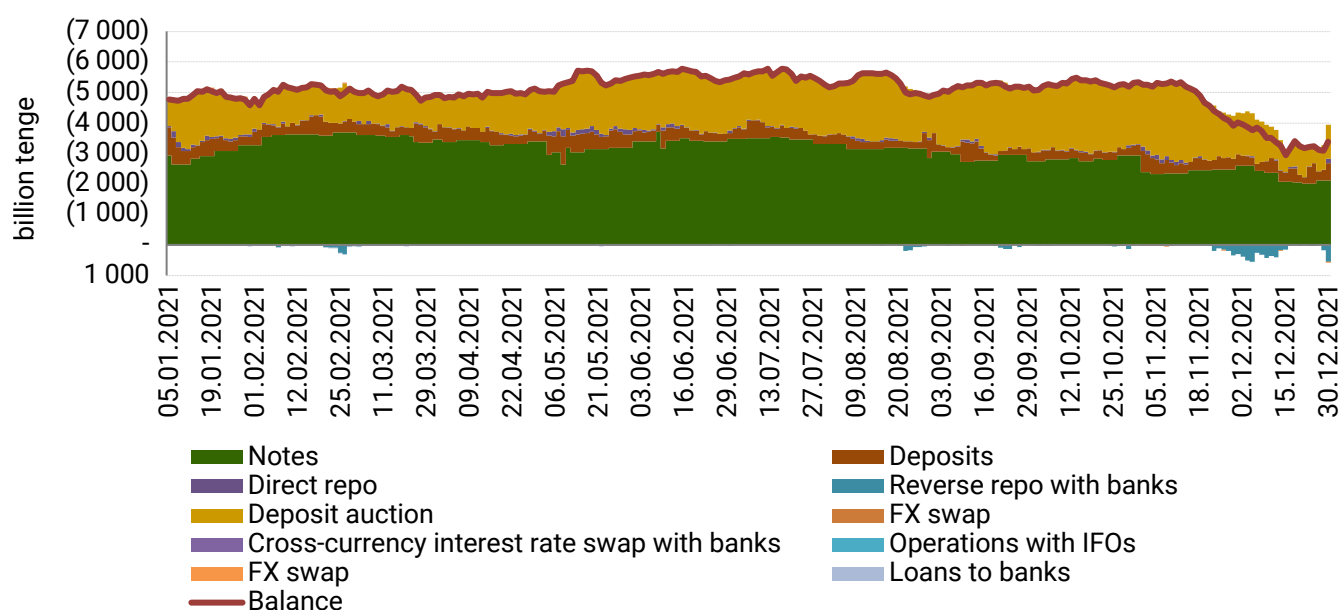
In executing the instruction of the President of the Republic of Kazakhstan to keep the inflation rate within 8.5%, by the end of 2021 the Government of the Republic of Kazakhstan finalized the implementation of strategic initiatives envisaged in the Comprehensive set of measures. In this regard, in conjunction with the National Bank and local executive authorities, a daily

monitoring and control over prices for socially important food products was carried out, and stabilization funds were replenished with the stocks of socially important foodstuffs. This enabled to reduce the price growth for socially important food products to 9.9% as of end-2021, which had a positive effect on stabilization of food inflation which determined more than half of the contribution to the overall price increase. As a result of joint actions taken by the government authorities, the annual inflation in the fourth quarter started to decelerate and made up 8.4% as of end-2021. Food prices went up by 9.9%, prices of non-food products – by 8.5% and prices for paid services – by 6.5%.

1.3.2 MONEY MARKET

In 2021, given the structural liquidity surplus in the money market that amounted to 3.4 trillion tenge as of January 1, 2022, the National Bank conducted operations to withdraw excess liquidity mainly by issuing short-term notes (Figure 1.3.2.1).

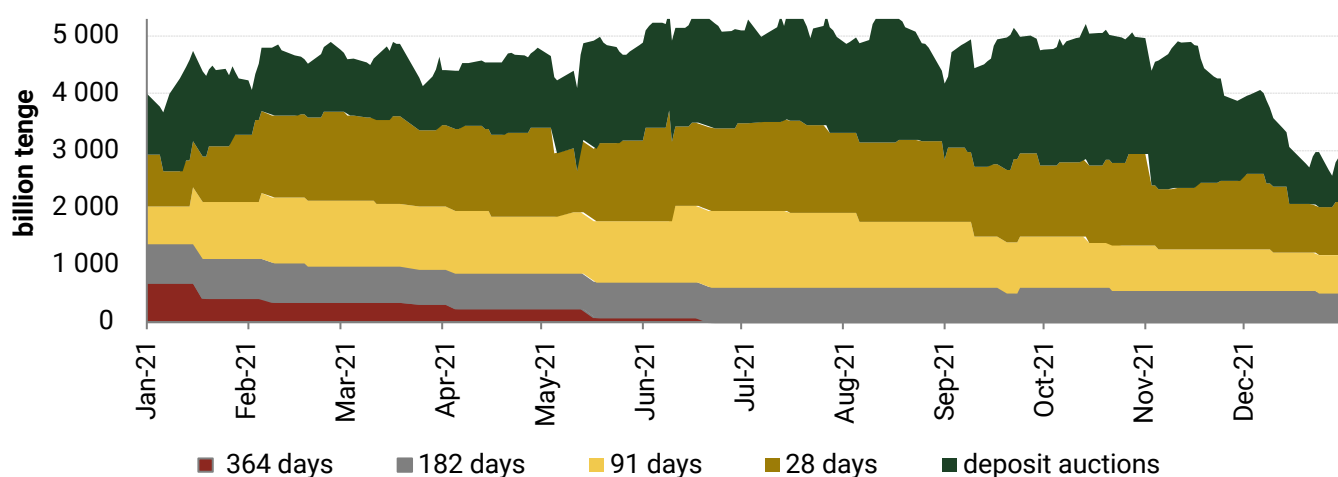
Figure 1.3.2.1 Open position of NBK operations



As part of the monetary policy implementation, the Bank continued to use the open market instruments for liquidity withdrawal. During 2021, 72 auctions were held to issue short-term notes with maturity from one to six months. Despite the fact that during 2021 the outstanding amount of notes decreased by 825 billion tenge to 2 102.5 billion tenge, notes remained to be a dominating instrument of the National Bank. In the structure of notes, the share of 6-month notes decreased significantly to 24%, while the share of one-month notes went up by 44.2%.

At the same time, liquidity was withdrawn by conducting deposit auctions and through standing facilities operations. In 2021, the National Bank conducted 245 deposit auctions and by the end of -December its open position amounted to 1 116.9 billion tenge. As part of standing facilities operations, deposit transactions were conducted in the OTC market, while repo and FX swaps were conducted on the platform of the "Kazakhstan Stock Exchange" JSC.

Figure 1.3.2.2 Open position of notes and deposits



In the periods of high demand for liquidity, with the highest demand in December 2021, the National Bank provided liquidity via reverse repo operations. In general, the average daily trading volume of overnight repo has increased over the year by 1.9 times to 484 billion tenge (in 2020 – 260 billion tenge).

Monetary policy operations ensured that money market rates were formed within the target band, which was changing along with the base rate growth.

From the second half of 2021, amid steady pro-inflationary pressure, the National Bank proceeded to progressively tighten the monetary policy. Thus, in 2021 the base rate was raised from 9% to 9.75% with the establishment of the interest rate band of ± 1.0 pp, which resulted in a corresponding increase in the money market rates.

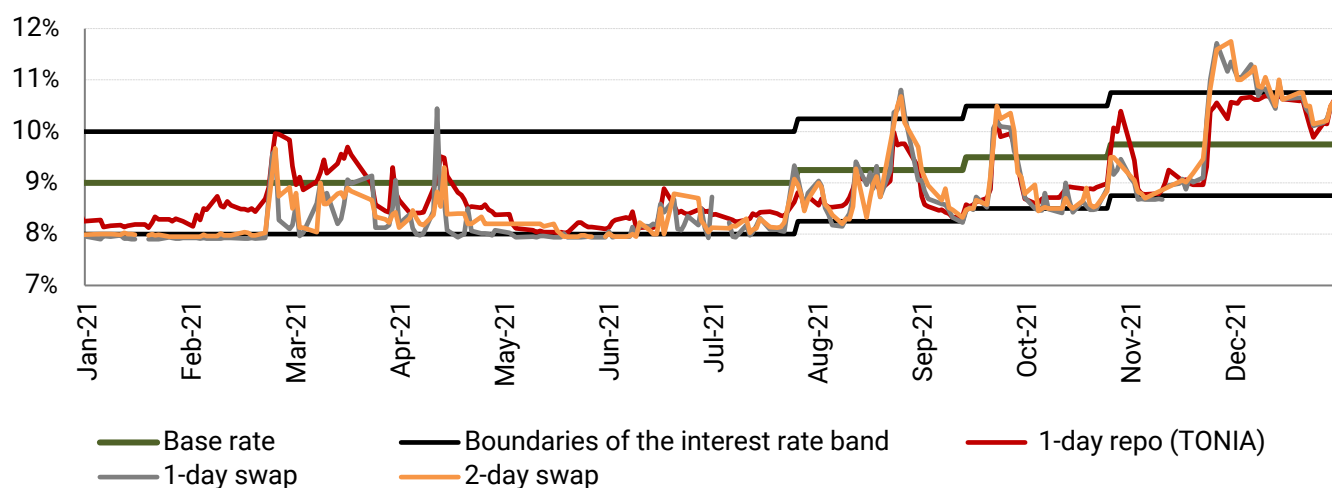
The target rate of the money market, TONIA (an overnight rate on repo with government securities from

the government securities basket) during 2021 was within the range of 8.03-10.71%. In the period of tax payments, interest rates on overnight repo transactions demonstrated typical growth closer to the upper bound of the base rate. Rates in the swap market were echoing the movements of TONIA getting higher in the periods of high demand for the tenge liquidity (Figure 1.3.2.3).

In repo market, the National Bank participated in the sector of “repos with a central counterparty”. The National Bank was generally not participating in the main session on the side of liquidity provision except for the period of tax payments and the corresponding heightened demand for the tenge liquidity.

During the additional trading session liquidity was provided and withdrawn via repos and swaps where the National Bank only acted as the only party to the transaction.

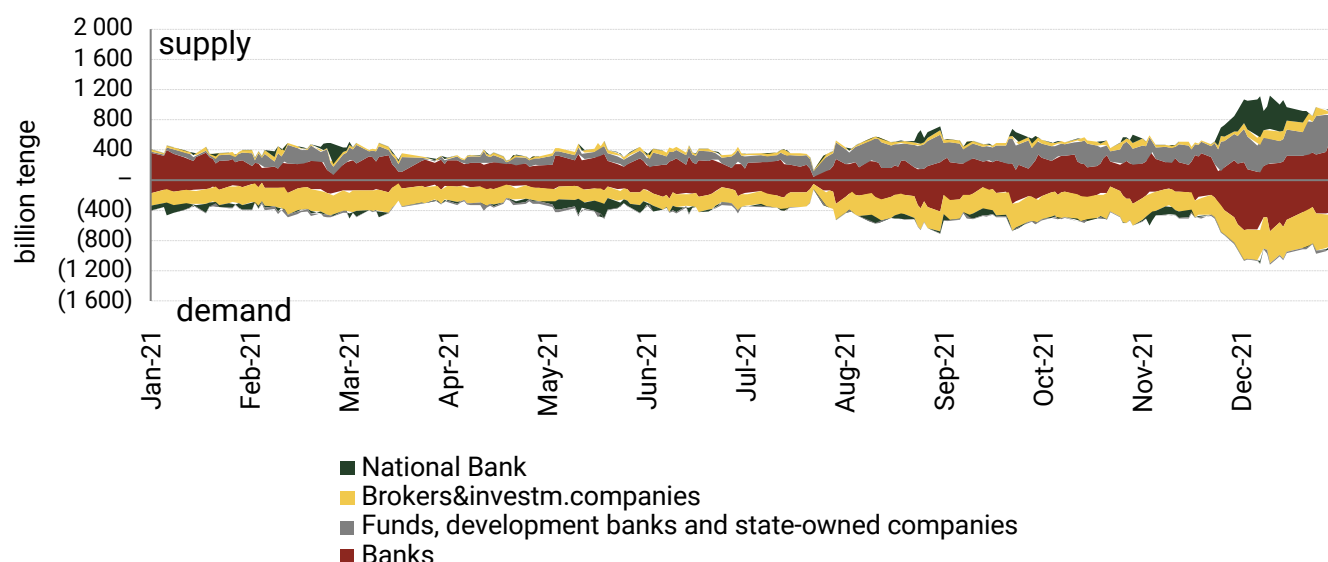
Figure 1.3.2.3 Interest rates in the repo and swap markets



In general, the money market rates were largely formed by the market participants, while the National Bank's participation was insignificant. In the overnight repo market, large market participants occupied the major share in attracting liquidity, while among them there was

an increase in the number of brokers and investment companies (Figure 1.3.2.4). Banks increased their share on the demand side at the end of 2021. The second-tier banks, development banks and state-owned companies were dominating placement of liquidity.

Figure 1.3.2.4 Structure of the overnight repo market in 2021



Development of the Government Securities Market.

In 2021, in conjunction with the Ministry of Finance of the Republic of Kazakhstan, the National Bank continued to build a risk-free yield curve and increase liquidity of the government bond market.

During 2021, the Ministry of Finance of the Republic of Kazakhstan, as part of the state budget deficit financing, issued government securities with maturity from one to 15 years totaling 2.5 trillion (at face value). Auction yields on government securities were within the range of 8.98%-10.87%.

In 2021, the most highly demanded government securities were those with maturity from one to five years. Government bonds worth 1.3 trillion tenge (at face value) were issued in this sector.

As a result of the joint effort between the National Bank and the Ministry of Finance of the Republic of Kazakhstan, the participation share of market investors (banks, insurance and brokerage companies) in securities auctions in 2021 went up to 69.2% versus 32.7% in 2020.

As of end-2021, there was a significant inflow of foreign investments into government securities. The share of non-residents in government bonds, including the National Bank's notes, increased from 3.25% to 4.26%. The volume of investments by non-residents

went up from 430 billion tenge at the beginning of 2021 to 863.1 billion tenge in October 2021 followed by its reduction in December to 595.5 billion tenge due to the global decline in investor risk appetite and the capital overflow to developed countries.

Besides, in 2021 there was a sizable increase in foreign holdings of government bonds of the Ministry of Finance of the Republic of Kazakhstan. Thus, investments of non-residents into government securities of the Ministry of Finance of the Republic of Kazakhstan at end-December 2021 amounted to 384.2 billion tenge, having increased on the year-to-date basis by 305.4 billion tenge from 78.8 billion tenge.

The growth in the participation share of market investors in initial offerings of government securities and an increase of foreign investments in government bonds had a positive effect on the liquidity level in the government debt market.

A work was also continued on the inclusion of sovereign bonds of the Republic of Kazakhstan in the J.P. Morgan Emerging Market Bond Index (GBI-EM). Together with the interested state bodies, a Council was established to build a risk-free yield curve and implement an Action Plan to include government securities in international indices.

The process of including government securities in the J.P. Morgan index (GBI-EM) involves several stages: preliminary observation ("radar"), inclusion in the Index Watch list and inclusion in the index. As a result of the work carried out in July 2021, J.P. Morgan placed government securities of the Republic of Kazakhstan "on the radar" for preliminary observation. The next step is to include government bonds in the Index Watch list.

1.3.3 FOREIGN EXCHANGE MARKET

In 2021, the exchange rate of the tenge was formed under the impact of both external and internal factors. The tenge was traded within a wide range between 414.77 to 436.35 tenge per the US dollar, having depreciated by 2.6% to 431.80 tenge per the US dollar as of year-end.

The main factors influencing the formation of the tenge exchange rate included the dynamics of oil prices, policy of central banks of developed countries that affected the dynamics of the US dollar and currencies of developing countries including currencies of countries-Kazakhstan's main trading partners as well as an inflow of non-residents into government securities of the Republic of Kazakhstan.

On the part of internal factors, the tenge dynamics was affected by the growing demand as a result of the recovering business activity, the National Bank's operations on conversion of the National Fund's assets, sales of export proceeds by the quasi-government sector entities as well as the National Bank's interventions conducted to prevent destabilization of the foreign exchange market at the end of the year.

During the year, the dynamics of oil prices had generally an upward trend. Given the increasing global demand as a result of gradual recovery of the global economy as well as an occasionally limited supply due to a decline in oil production and reserves in the USA, the dynamics of Brent oil prices had demonstrated a record-high growth rate for the first time since 2009, having increased by

69.3% over the year from 41.8 to 70.7 US dollars per barrel, thus supporting the exchange rate of the national currency.

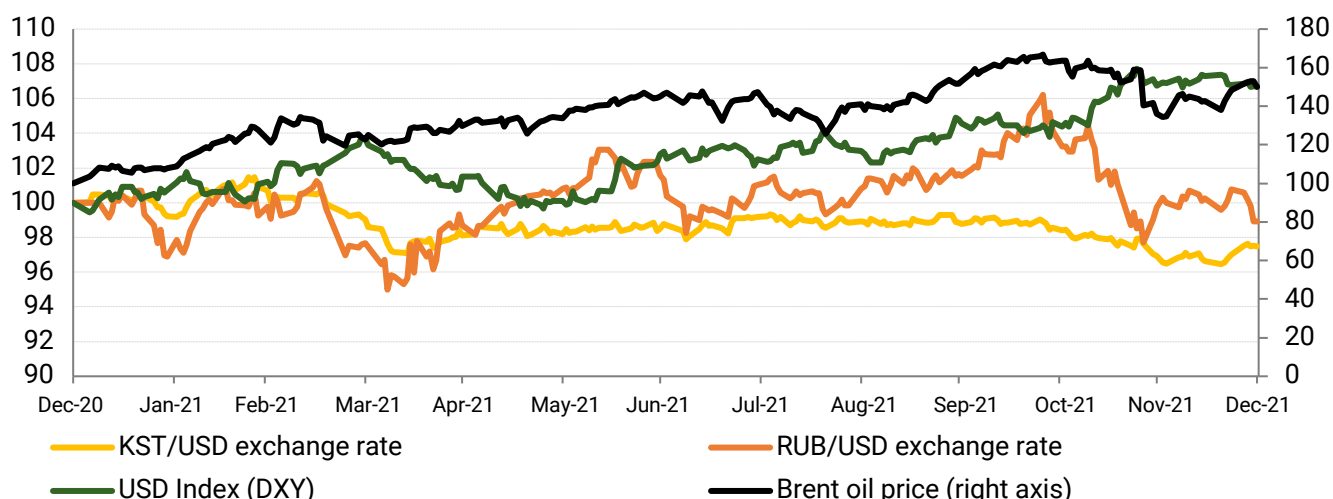
However, a positive effect from the rise in oil prices was offset by the worldwide appreciation of the US dollar and the growing demand for foreign exchange in the domestic market. Monetary and fiscal support measures undertaken by central banks speeded up inflation to a steadily high rate around the globe. Thus, as of end-2021, inflation in the USA had reached its record high number over the last 40 years and accounted for 7.1 %, inflation in Russia had demonstrated the maximum for the last 6 years and made up 8.4% and in the EU, it was 5.3%, which is the maximum since the start of observation period in 1997.

Due to acceleration of inflation, central banks of developed countries started to move to a neutral monetary policy. Market expectations about an earlier curtailment of the economic stimulus program by the US Federal Reserve have intensified. As a result, the appreciation of the US dollar was observed worldwide, thus putting pressure on the currencies of developing countries, including the tenge. The US dollar index (DXY) at the end of 2021 had demonstrated a maximum growth rate over the recent 5 years, having increased by 6.4%. On the contrary, the emerging market currency index decreased by 9.25%.

The demand for foreign exchange in the domestic market was observed due to the growing imports, especially consumer imports, driven by pent-up demand and recovering economic activity as well as owing to fiscal stimulus provided via the government support measures, and the increasing volume of foreign currency deposits.

Moreover, the tenge exchange rate was negatively affected by depreciation of the Russian ruble, including periods of aggravation of geopolitical tensions and intensified sanction rhetoric in respect of Russia.

Figure 1.3.3.1 Movement of the Russian ruble and the tenge against the US dollar, oil price and USD Index (December 31, 2020 = 100)



In order to limit a destabilizing effect of external factors on the domestic foreign exchange market amid a supply-side constraint, the National Bank, for the first time since October 2020, conducted foreign currency interventions in certain periods of high volatility and low liquidity in November and December 2021; such interventions equaled 239.1 million US dollar and 252 million US dollar, respectively.

The tenge exchange rate was supported by operations on conversion of the National Fund's resources for making transfers to the budget, for which purpose 9.6 billion US dollars was sold in the foreign exchange market, as well as sales of foreign exchange by the quasi-government sector entities as part of the requirement to sell 50% of export foreign exchange proceeds by the quasi-government sector companies introduced in 2020. Within the framework of this requirement, in 2021 the quasi-government sector companies sold their foreign exchange proceeds for about 3.1 billion US dollars.

The National Bank was also ensuring coordination of activities of the quasi-government sector companies in the foreign exchange market in order to distribute foreign exchange operations evenly and to use netting within groups to minimize impact on the state of the foreign exchange market.

In order to ensure transparency of the implemented exchange rate policy, the National Bank published data on foreign exchange interventions and information about the volume of monthly conversions and transfers from the National Fund on the official Internet resource on a monthly basis.

In addition, an active communication policy was pursued. On a regular basis, the National Bank provided an in-depth and prompt coverage of the situation in the domestic foreign exchange market with a detailed explanation of the main reasons and factors that influenced the dynamics of the national currency exchange rate.

1.3.4 DEPOSIT MARKET²

During 2021, deposits of residents at depository organizations went up by 22.7%, amounting to 27.1 trillion tenge, including in the national currency – by 25.1% to 17.3 trillion tenge, and in foreign currency – by 18.6% to 9.8 trillion tenge.

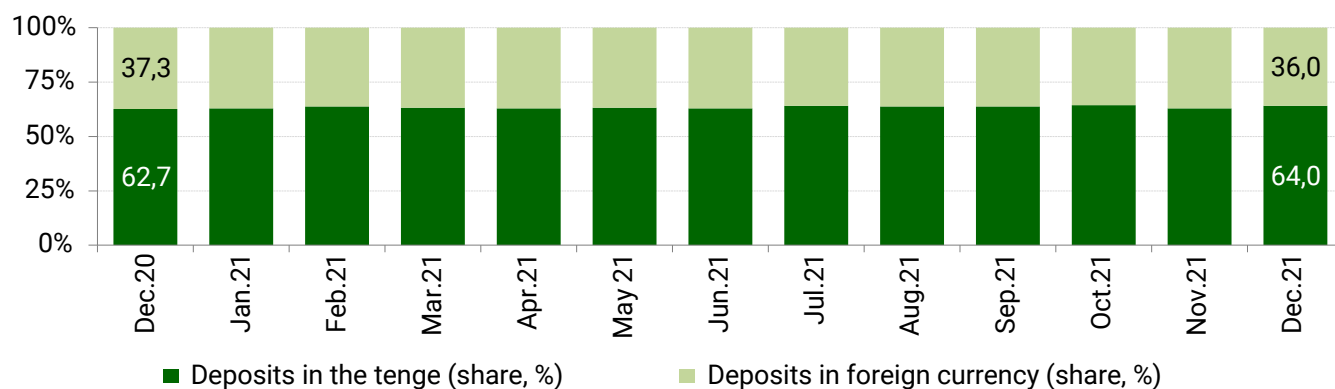
In 2021, corporate deposits increased by 22.5% to 13.8 trillion tenge. Within their structure, deposits in the national currency expanded by 19.8% to 8.6 trillion tenge, and foreign currency deposits – by 27.2% to 5.2 trillion tenge. Hence, during 2021 dollarization of corporate deposits grew from 36.2% to 37.6%.

Retail deposits went up by 22.9% to 13.3 trillion tenge, including deposits in the tenge – by 30.9% to 8.7 trillion tenge, and deposits in foreign currency – by 10.0% to 4.6 trillion tenge. Dollarization of retail deposits has decreased from 38.4% to 34.4% over the year.

Overall, dollarization of deposits in the banking system during 2021 declined from 37.3% to 36.0% (Figure 1.3.4.1).

² The data includes information only about residents of Kazakhstan excluding financial organizations of the Republic of Kazakhstan

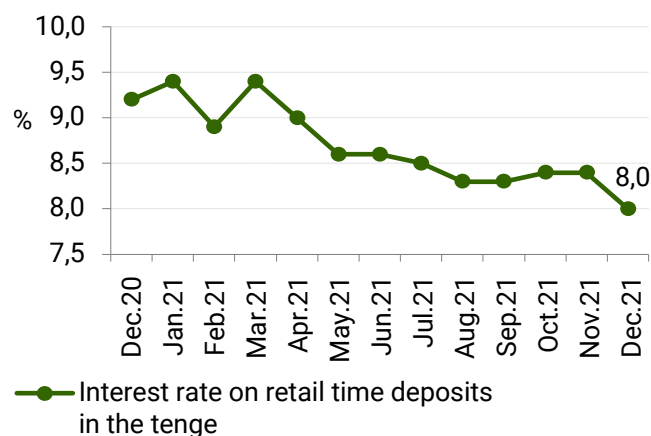
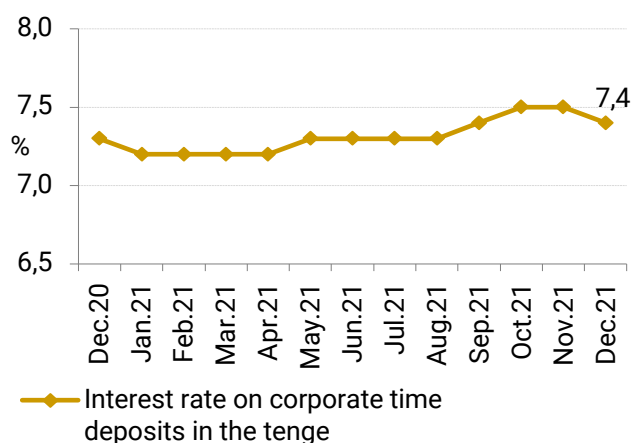
Figure 1.3.4.1 The dynamics of deposits of residents



In 2021, the weighted average interest rate on time deposits of non-bank corporate entities in the national currency increased from 7.3% to 7.4%, on retail time deposits in the national currency – decreased from 9.2% to 8.0% (Figure 1.3.4.2).

Over the year, interest rates on time deposits of non-bank corporate entities on the weighted average basis remained unchanged at 7.3%. However, interest rates on retail time deposits in the national currency had declined to 8.6% in 2021 due to the growth in the deposit base.

Figure 1.3.4.2 Dynamics of interest rates on time deposits in the tenge



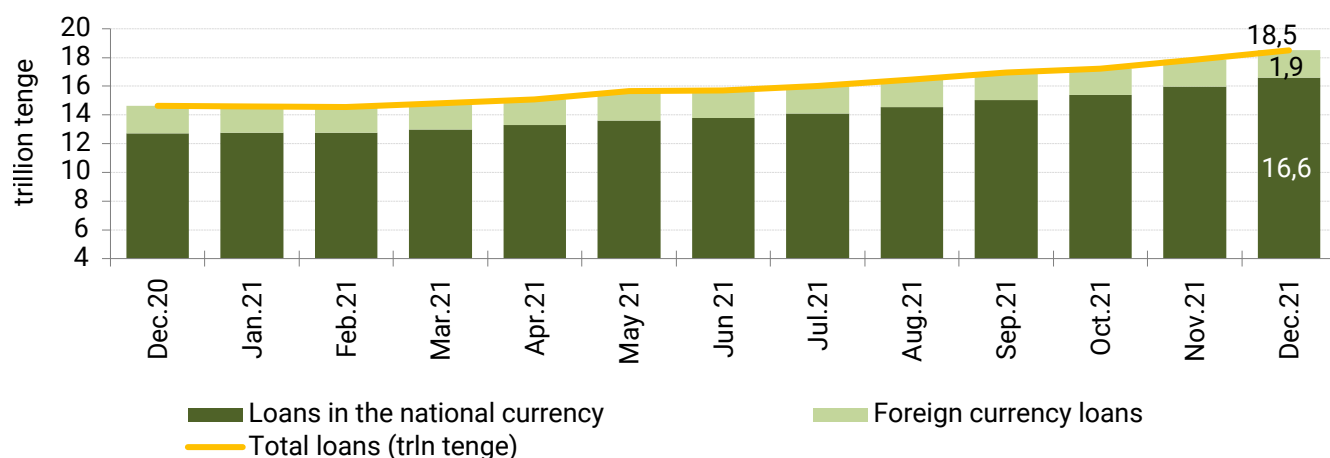
1.3.5 CREDIT MARKET³

During 2021, bank credits to the economy went up by 26.5%, amounting to 18.5 trillion tenge. Long-term lending in 2021 grew by 28.3% to 16.0 trillion tenge, and short-term lending expanded by 15.9% to 2.5 trillion tenge. The share of long-term credits in the structure of bank loan portfolio accounted for 86.7% (in December 2020 – 85.4%).

Credits in the national currency in 2021 went up by 30.3% to 16.6 trillion tenge, credits in foreign currency – by 0.7% to 1.9 trillion tenge (Figure 1.3.5.1). As a result, in 2021 the relative share of credits in the tenge in the total lending volume increased from 87.0% to 89.7%.

³ The data includes information only about residents of Kazakhstan excluding financial organizations of the Republic of Kazakhstan

Figure 1.3.5.1 Bank credits to the economy

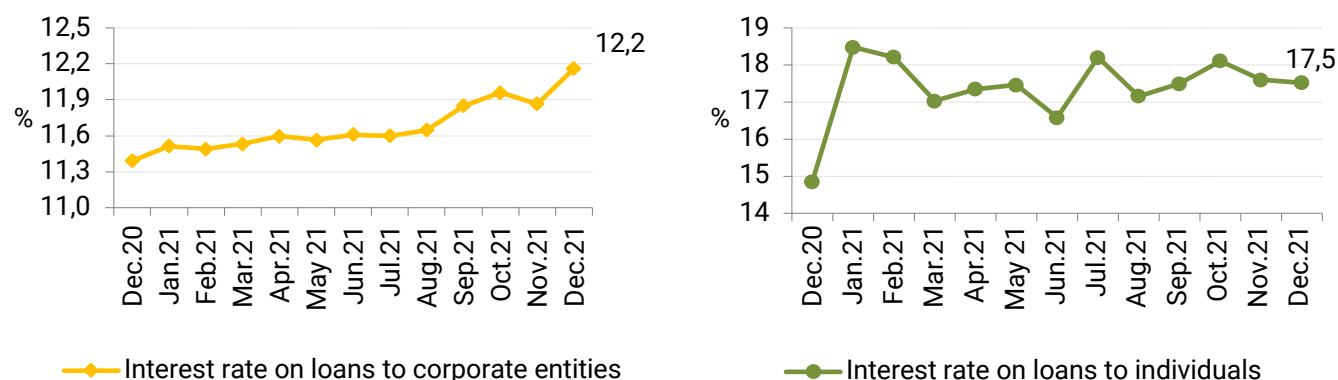


Loans to individuals in annual terms went up by 42.7% to 10.7 trillion tenge, and their relative share increased from 51.5% to 58.1%.

Given the recovering business activity, loans to non-bank corporate entities in 2021 expanded by 9.3% to 7.8

trillion tenge, and SME loans increased by 1.5 times to 3 772.2 billion tenge. The largest amount of bank credits to enterprises is to the agricultural sector – 41.1%, the industry – 32.7%, communication – 10.7%, trade – 9.3%, and construction – 0.8%.

Figure 1.3.5.2 Weighted average interest rates on loans provided in the tenge



Given the increase of the base rate, from mid-2021 the weighted average interest rate on loans provided in the national currency to non-bank corporate entities went up from 11.4% in December 2020 to 12.2% in December 2021, and on loans to individuals – from 14.9% to 17.5%.

On the weighted average basis, over the year the change in the cost of loans to corporate entities in the tenge has remained insignificant, having decreased to 11.7% from 11.8% in 2020. Loans to individuals demonstrated a more significant increase from 16.9% in 2020 to 17.6% in 2021; however, this had not resulted in holding down the demand for retail loans amid recovering earnings of the population (Figure 1.3.5.2).

1.4 ENSURING FINANCIAL STABILITY

As part of the effort to help ensuring the banking sector's stability, in 2021 the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market and the National Bank revised the measures of regulatory support for banks within the framework of the counter-cyclical support facility initiated during the COVID-19 pandemic. As the financial performance of banks improved, the list of support measures was reduced in order to return to pre-pandemic prudential standards. At the same time, the measures that had the most positive effect on banks were extended until the end of 2021.

As of end-2021, bank assets totaled 37.6 trillion tenge, having increased by 20.7%, or 6.4 trillion tenge. The loan portfolio of banks amounted to 20.2 trillion tenge, having increased by 27.9%, or 4.4 trillion tenge. High-quality liquid assets of banks equaled 11.7 trillion tenge at end-2021, having decreased by 7.6% compared to 2020 and accounting for 31.1% of total assets.

During 2021, the corporate loan portfolio expanded by 13.8% (-1.5% in 2020), amounting to 9.2 trillion tenge. Despite significant growth of the corporate loan portfolio in 2021, the systemic problems inherent in this segment remain relevant. The impact of unstable situation in the post-pandemic period as well as a low solvency level of corporate borrowers, in particular, insufficient operational efficiency, limited equity, liquidity and collateral continue to be the main factors restraining banks in expanding corporate lending, despite the presence of an adequate liquidity cushion.

At the same time, the retail loan portfolio in 2021 grew at a faster pace. Thus, the buildup of retail loan portfolio of banks in 2021 amounted to 40.9%, reaching 10.0 trillion tenge against 12.6%, or 7.1 trillion tenge in 2020. The largest increase is observed in the segments of consumer lending and mortgage housing loans. The expansion in consumer loans in 2021 amounted to 33.5% against 4.0% in 2020 due to a high demand for this type of lending on the part of population and an active implementation of various marketing campaigns by banks. The growth of the mortgage loan portfolio in 2021 accounted for 38.3% (32.3% in 2020), reaching 3.4 trillion tenge. Government housing programs for the people and the possibility of using retirement savings for improving housing conditions have become the main factors in building up their mortgage loan portfolios by banks.

During 2021, volumes of loans past due more than 90 days decreased (by -38.2%, or 413.3 billion tenge). A similar trend was observed on created provisions that amounted to 1.4 trillion tenge as at January 1, 2022, having decreased over 2021 by -23.2%, or 424.0 billion tenge.

The share of loans past due more than 90 days in the corporate loan portfolio of banks at January 1, 2022 accounts for 1.6% (3.4% of the corporate portfolio), having decreased by 5.2% over 2021. The main reason for reduction in overdue debt is the write-off of a large amount of problem debt in the corporate sector. The asset quality of the retail segment is better as compared to the corporate portfolio but also retains downside risks due to the prolonged impact of the coronavirus crisis and the continuing trend of increasing debt of the economically active population. At January 1, 2022, the share of loans past due more than 90 days in the retail portfolio was 1.7% (3.5% of the retail portfolio of banks) compared to 5.4% at the end of 2020.

Bank liabilities amounted to 33.1 trillion tenge, having increased by 21.6%, or 5.9 trillion tenge during the reviewed period. Corporate and retail deposits account for the largest share of growth – 22.8% (2.5 trillion tenge) and 18.5% (2.0 trillion tenge), respectively. Owners' equity of banks amounted to 4.5 trillion tenge, having increased by 14.7%. At end-2021, all banks complied with prudential requirements on capital adequacy, liquidity and other mandatory requirements.

In order to maintain the banking sector's stability, in 2021 its rehabilitation through removal of troubled banks from the system was in progress. As of end-2021, the number of participants in the banking sector of the Republic of Kazakhstan decreased by four banks, two of which were deprived of their banking licenses and the other two had surrendered their licenses voluntarily.

In addition, the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market, in coordination with the National Bank, developed the supervisory stress-testing methodology; implementation of the supervisory stress-testing toolkit in the supervisory process will enable to regularly assess capital adequacy of banks in case of realization of exceptional but plausible events that can exert a negative effect on financial condition of these banks. The analysis of key risks by using the tools of risk-

based supervision will allow developing the full picture in respect of each bank.

To a large extent, the funding structure of banks is traditionally represented by customer deposits, which at the end of 2021 amounted to about 26.0 trillion tenge, or 78.6% of the banking sector's liabilities, where 46.5% and 24.6% are time deposits and current accounts, respectively. During the reviewed period, the growth of deposits amounted to 20.7%. There is a continuing downward trend in the level of deposit dollarization – at end-2021 the share of foreign currency deposits accounted for 37.1%.

In 2021, the National Bank implemented a set of measures aimed at strengthening the depositor protection and increasing sustainability of the banking sector's funding base. In order to fulfill the instruction of the Head of State to strengthen the protection of rights of retail depositors and heighten the interest in long-term savings on the part of population, the National Bank initiated amendments to the Law "On Mandatory Insurance of Deposits Placed in the Second-Tier Banks of the Republic of Kazakhstan", providing for an increase in the insured amount on savings deposits in the national currency from 15 to 20 million tenge and an increase in the total guarantee for one bank to 20 million tenge. A new amount of insurance enhances the role of domestic savings for the full restoration of the banking sector's function of lending to the economy on market principles as well as provides an incentive for more active migration of large deposits to savings deposits, thus strengthening the competitive advantage of the tenge deposits over foreign currency deposits.

Moreover, in order to determine the amount of install paid by banks – members of the deposit insurance system in line with the risk assumed by the "Kazakhstan Deposit Insurance Fund" JSC, a new model for assessing financial condition of banks was implemented from September 1, 2021. The model enables to detect deterioration in financial condition at early stages ahead of revision of ratings by international rating agencies.

In September 2021, as part of the digitalization of activities of the "Kazakhstan Deposit Insurance

Fund" JSC, an information system was launched for filing applications for the payment of guaranteed payout to depositors of liquidated banks in an electronic form through the electronic payment portal. According to legislative changes, an application for receiving a guaranteed payout can be submitted electronically directly to the "Kazakhstan Deposit Insurance Fund" JSC without visiting the agent bank branches (carrying out a full cycle of the guaranteed payout process: from downloading registers of depositors to the payment itself). The practice of submitting applications online is unique in the CIS region.

The Financial Stability Council of Kazakhstan.

Within the scope of implementing the anti-crisis policy and promoting financial stability, with active involvement of the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market, five sessions of the Financial Stability Council of the Republic of Kazakhstan ("the Council") were held in 2021. The Council, inter alia, discussed how government programs for supporting the demand in the residential real estate market affected financial stability as well as top priorities in the supervisory policy of the banking sector in 2021. As part of ensuring the financial system stability, the Council approved a new model for assessing the financial condition of banks participating in the deposit insurance system and the main approaches to developing the distressed assets market in Kazakhstan; it also considered amendments to the laws related to simplification of legislative requirements for converting microfinance organizations into the second-tier banks. In order to develop ecosystems and financial technologies, the proposals of the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market to expand the activities of banks, bank holding companies and their subsidiaries to participate in the capital of non-financial organizations were supported. The Council also decided to consider introducing the digital tenge based on the results of the risk-benefit analysis, fine-tuning the technological aspects as well as the effect for the national payment system.



SECTION 2.

NATIONAL BANK'S ACTIVITIES



2.1 PAYMENT SYSTEM DEVELOPMENT

With a view to develop the payment industry, the National Bank makes a systematic effort to implement infrastructure solutions forest out by the Program for the Development of the National Payment System in the Republic of Kazakhstan until 2025.

The key activities of the Program are related to the organization of the national payment infrastructure, with the Instant Payments System and the Interbank System of Payment Cards as the main components; they are aimed at standardization and ensuring operational interaction of market participants (unification of the QR code format, transition to ISO 20022 international standard format for financial messaging, development of Open API and Open Banking).

In 2021⁴ the platforms of the Instant Payments System and the Interbank Payment Card System were developed and successfully tested together with the financial market participants, the necessary regulatory framework was established that determines the legal status and operation of the systems. The national standard for the “payment” QR-code was developed and approved⁴, it allows to build a technological foundation for integration between various QR code payment services.

In 2021, banks continued to work on improving the infrastructure of non-cash payments, introducing innovative technologies, improving the quality and expanding the online financial services offered to customers, which enabled to keep the growth trend in the volume of non-cash payments and money transfers. The Bank proceeded with further development of the Identification Data Exchange Center service, which allows the financial market participants to identify clients without visiting the offices of financial organizations by using biometric technology. Since the launch in 2020, more than 17 million requests from financial organizations have been processed through the service.

In 2021 the National Bank, in conjunction with the stakeholder government authorities, prepared the draft Program for establishing the National Digital Biometric Identification Platform. The program was developed with the aim of consolidating existing

initiatives of government authorities in the field of biometric solutions into a unified system to improve the efficiency, security and expansion of electronic government and financial services with the provision of multimodal user identification (face biometrics, fingerprints, voiceprint, etc.).

The “Digital tenge” pilot project was implemented, the main goals for 2021 included testing the viability of the digital tenge concept through experimental confirmation of the technological feasibility of a retail platform based on distributed ledger technology, as well as determining the main parameters of the central bank digital currency model for Kazakhstan in collaboration with all stakeholders.

In May 2021, the National Bank published a “Digital Tenge” research report for public discussions. In December 2021 a report on the results of the pilot project was published. During the year specialized meetings and discussions were held with the market participants, the expert community, government authorities and international partners.

The measures taken will improve the availability of financial services for communities and businesses, reduce transaction costs, speed up payments within the country, increase the share of cashless payments and transparency of cash flows and will also ensure the security and stability of the financial market.

2.1.1 PAYMENT SYSTEMS

Nineteen payment systems are functioning within the territory of the Republic of Kazakhstan, of which the Interbank System of Money Transfers and the Interbank Clearing System belong to the National Bank. The National Bank’s payment systems are oriented at payments in the national currency within the territory of the Republic of Kazakhstan and process 91% of the total volume of non-cash payments in the country. Private payments systems are also functioning in the market and are represented by payment card systems and money transfer systems.

⁴ ST RK 3712-2021 of August 13, 2021

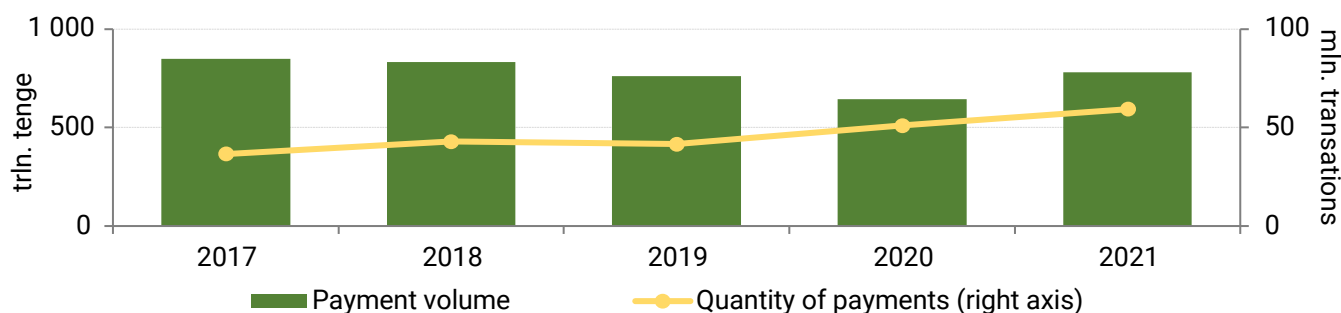


The level of uninterrupted operation of payment systems, the system productivity and volumes of payments processed by the systems are indicators of efficient functioning of the National Bank's payment systems.

Operability coefficients of the National Bank's payment systems speak for a high level of their uninterrupted operation and in 2021 they equaled 99.98% for the Interbank System of Money Transfers and 100% for the Interbank Clearing System, on average.

The volumes of payments processed through the National Bank's payment systems in 2021 equaled 59.3 million transactions totaling 782.1 trillion tenge (Figure 2.1.1.1). Compared to 2020, the quantity of payments in the payment systems increased by 16.2% (by 8 262 800 transactions), and the payment amount – by 21.2% (by 136.6 trillion tenge). On average, 241 200 transactions amounting to 3 179 billion tenge were processed through the payment systems daily.

Figure 2.1.1.1 Dynamics of payment flows in the National Bank's payment systems



Interbank System of Money Transfers

At the end of 2021, 33 financial organizations, including all infrastructure entities of the financial market were the members of the Interbank System of Money Transfers. In 2021, 18.8 million payments amounting to 773.4 trillion tenge were processed through the system. Compared to 2020, the payment volume increased by 21.2% (by 135.3 trillion tenge), and the quantity of electronic payment messages processed through the system went up by 25.4% (by 3.8 million transactions). The growth in the volume of payments processed through the Interbank System of Money Transfers is related to the increased amounts of payments on interbank operations with short-term deposits (by 92.6%) and on operations with foreign exchange and precious metals (by 25.9%).

An average amount of one payment in the Interbank System of Money Transfers in 2021 equaled 41.1 million tenge and decreased by 3.3% as compared to 2020 (by 1.4 million tenge). The largest share in terms of the quantity of payments in the Interbank System of Money Transfers was among payments of up to 3 million tenge (82.1%), and the bulk of payments in terms of volume – payments above 1 billion tenge (the share – 85.3%).

The system mainly processed payments on securities operations of Kazakhstani residents (32.0% of the total volume of payments), interbank operations with short-term deposits (45.6%) and on operations with foreign exchange and precious metals (7.9%). In 2021,

the volumes of payments for goods and services accounted for 7.2% of the total volume of payments processed in the system.

Interbank Clearing System

At the end of 2021, 23 financial organizations were the members of the Interbank Clearing System. In 2021, 40.5 million electronic payment messages of 8.7 trillion tenge were processed through the system. Compared to 2020, the quantity of payment messages in the clearing system went up by 12.3% (by 4 451 600 payment documents), and the payment amount increased by 17.1% (by 1 271.6 billion tenge).

An average amount of one payment in the Interbank Clearing System in 2021 was 214 400 tenge, having increased by 4.3% (by 8 800 tenge) compared to 2020.

The bulk of payments in the clearing system falls on payments of economic entities for goods and intangible assets (the share in the total volume of payments in the system accounted for 26.3%) and provided services (the share – 25.8%); along with that, payments to the budget and payouts from the budget made up 13.2%.

International Remittances

International remittances represent a simple and affordable channel for a fast transmission and receipt of money by individuals between countries without opening a bank account.

At end-2021, eight international remittance systems have been functioning within the territory of Kazakhstan: the Gold Crown, Western Union, UniStream, Contact, Faster, MoneyGram, UPT and Ria Money Transfer.

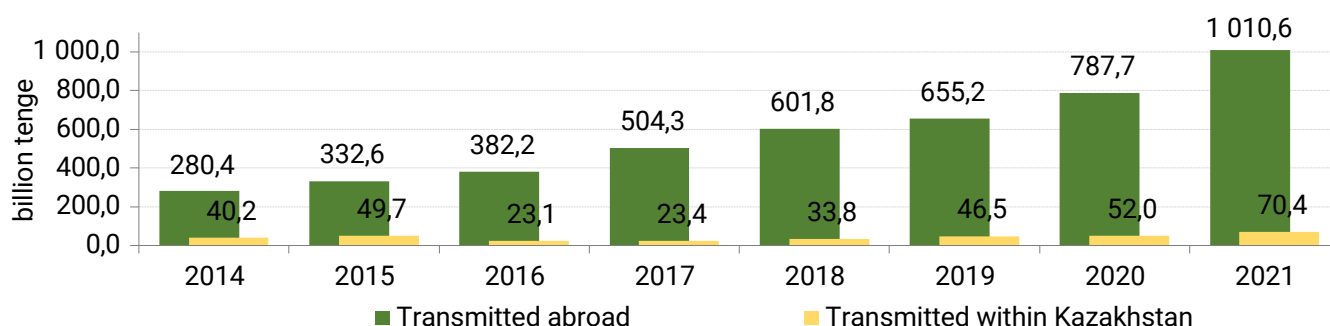
As of end-2021, the volume of money transmitted abroad via international remittance systems made up 1 010.6 billion tenge, having increased by 28.3% compared to 2020. The average amount of one transfer abroad was 391 700 tenge.

The largest recipients of money transfers in 2021 had been Uzbekistan (29.5%), Turkey (20.9%), Russian Federation (17.5%) and Kyrgyzstan (14.3%).

During the same period, 283.5 billion tenge were transmitted to Kazakhstan from abroad, which is by 1.2% less than in 2020. The average amount of one transfer from abroad was 250 600 tenge.

Transfers totaling 70.4 billion tenge were made across Kazakhstan via international remittances (the average amount of one transfer is 113 200 tenge). As compared to 2020, the growth in the volume of transfers across Kazakhstan transmitted via such systems accounted for 35.4% (Figure 2.1.1.2).

Figure 2.1.1.2 Dynamics of the change in volumes of money transmitted via remittance systems



2.1.2 PAYMENT SERVICES MARKET

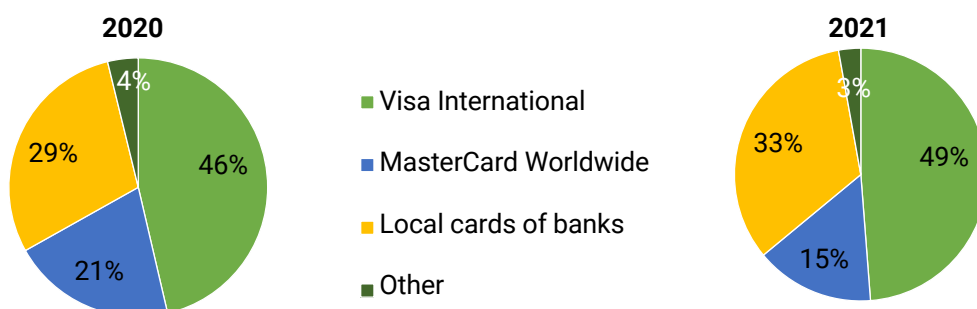
Payment services are provided by banks, organizations engaged in certain types of banking operations and non-bank payment organizations.

Payment Cards

At the end of 2021, 59.3 million payment cards were circulating in the country (the annual growth of 23.5%),

of which – 43.6 million debit cards, 13.8 million credit cards, 1.7 million debit cards with a credit limit, and 0.1 million pre-paid cards. In Kazakhstan, 19 banks and the “KazPost” JSC are issuing payment cards; 67% cards in circulation are the cards of international payment systems: Visa International, MasterCard, American Express International, and UnionPay International (Figure 2.1.2.1).

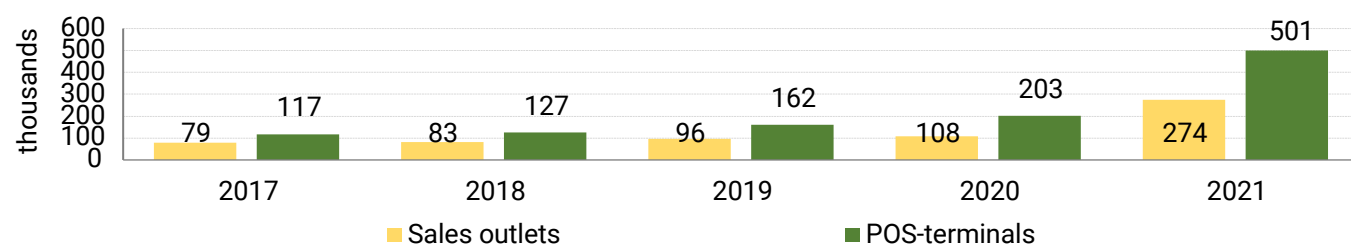
Figure 2.1.2.1 Share of payment cards of international payment systems in the total volume of cards in circulation



The infrastructure of payments for goods and services with the use of payment cards expanded significantly. At the end of 2021, 12 443 ATMs were functioning within the territory of the Republic of Kazakhstan, of which 50.2% are ATMs with the cash-in functionality; there

were 273 947 sales outlets accepting payment cards (a 2.5 times growth compared to 2020); and 500 684 POS-terminals were installed (a 2.5 times growth) at 414 567 retail outlets (Figure 2.1.2.2).

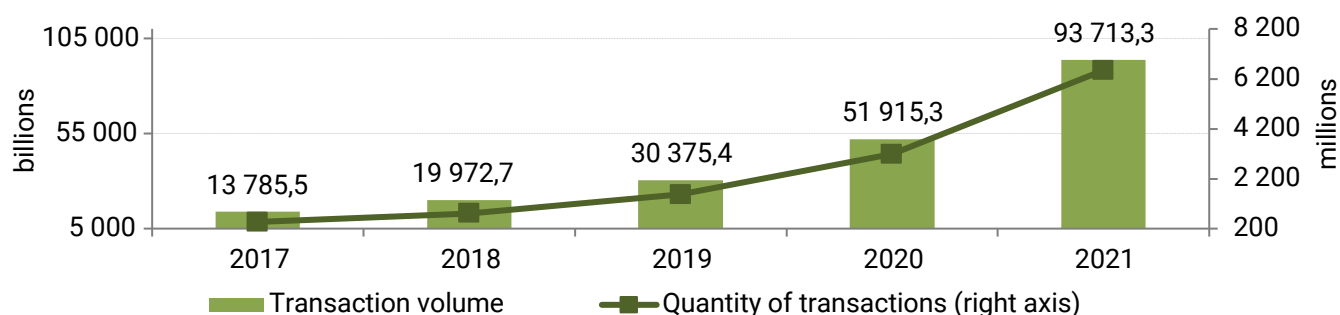
Figure 2.1.2.2 POS-terminals at sales outlets



During 2021, 6.5 billion transactions were conducted with the use of payment cards of Kazakhstani issuers (a two-fold growth compared to 2020) in the amount of

93.7 trillion tenge (a 80.5% growth versus 2020) (Figure 2.1.2.3).

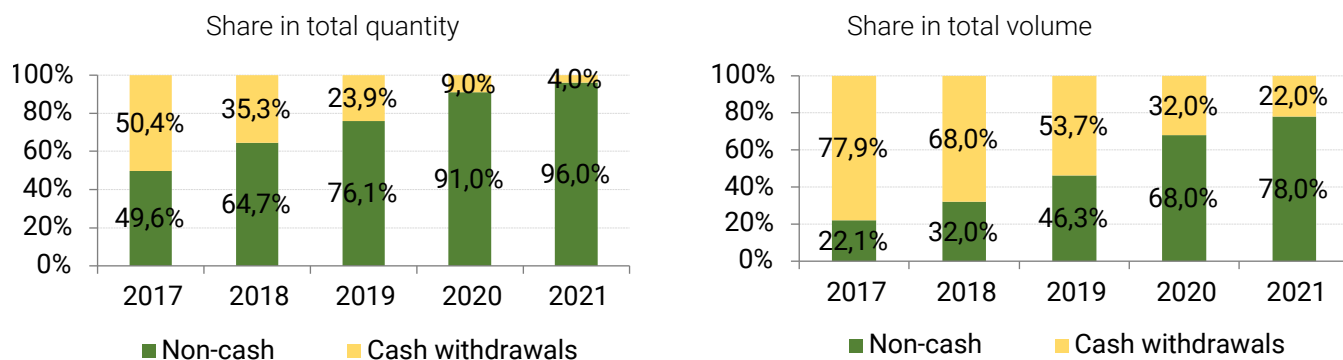
Figure 2.1.2.3 Quantity and volume of operations conducted with the use of payment cards of Kazakhstani issuers



During 2021, the share of non-cash operations was growing (from 68% to 78%) and the share of cash

withdrawals was decreasing (from 32% to 22%) (Figure 2.1.2.4).

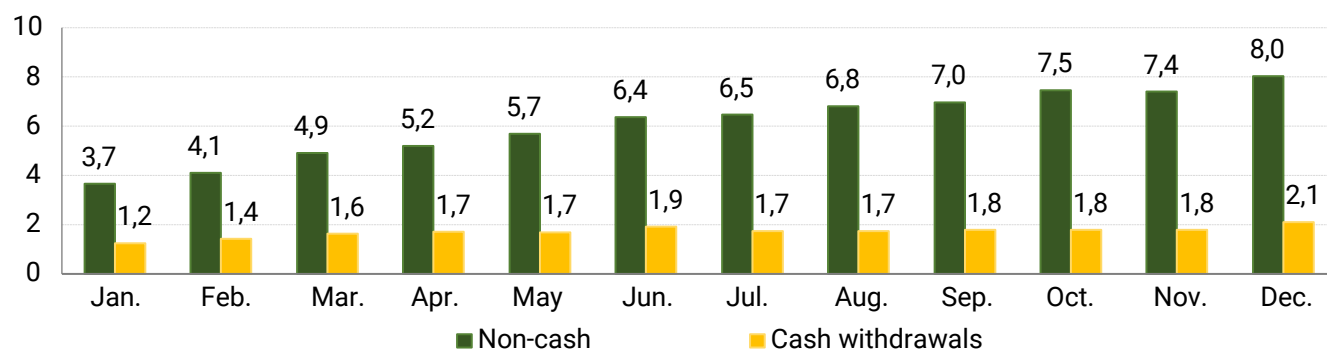
Figure 2.1.2.4 Structure of quantity and volume of operations, by type of operations



In 2021, an overall quantity and volume of non-cash operations with the use of payment cards grew by 2.2 and 2.1 times, respectively, and totaled 6.3 billion transactions for 73.1 trillion tenge.

In 2021, the quantity of operations on cash withdrawals from payment cards decreased by 8% and equaled 271 million operations. During 2021, payment cardholders cashed out 20.6 trillion tenge (Figure 2.1.2.5).

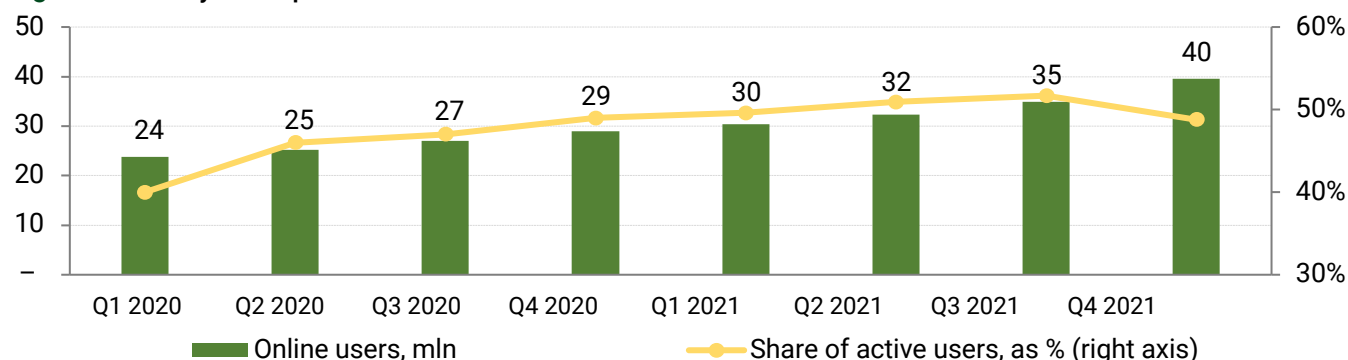
Figure 2.1.2.5 Dynamics of operations with the use of payment cards in 2021, in trillion tenge



From the beginning of the year, the activity in using bank online channels increased by 38% (Figure 2.1.2.6).

At the end of 2021, the number of active users of online/mobile banking was 19.3 million individuals.

Figure 2.1.2.6 Dynamic pattern of the number of online users of bank services



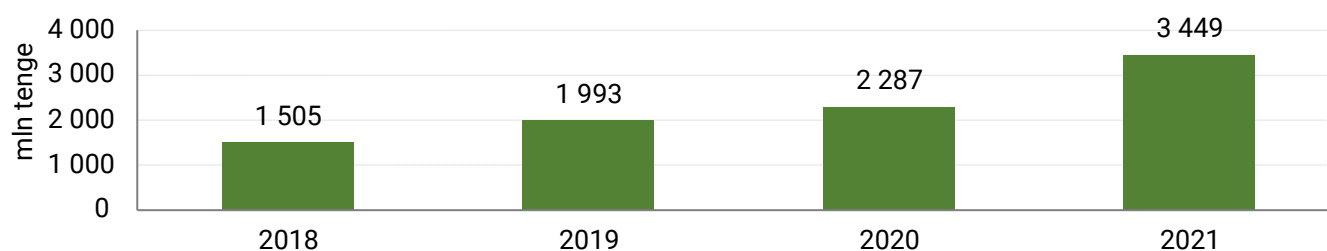
Payment Services of Payment Organizations

By the end of 2021, the National Bank registered 93 payment organizations, which have the right to provide certain types of payment services to customers (payment via electronic terminals, dissemination of electronic money and processing of operations with the use of electronic money, processing of operations

with the use of payment cards via the Internet and mobile applications).

As of end of 2021, the quantity of transactions processed through the services of payment organizations decreased by 24.0% and made up 533.5 million transactions. In 2021, the transaction volume amounted to 3.43 trillion tenge (a 50.0% growth over the year compared to 2020) (Figure 2.1.2.7).

Figure 2.1.2.7 Volumes of operations conducted via services of payment organizations in 2021



Payment organizations acted as operators of 24 systems of electronic money out of 28 systems of electronic money functioning in Kazakhstan, and three systems of electronic money are operated by the second-tier banks and the "KazPost" JSC. As of end-2021, operations

with electronic money totaling 263 billion tenge were conducted via the services of payment organizations, accounting for 64.7% of the overall turnover of functioning systems of electronic money.

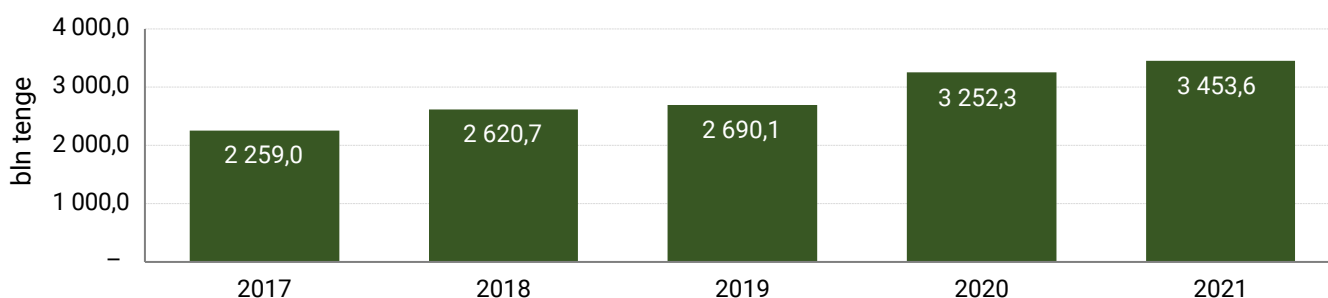
2.2 CASH CIRCULATION

2.2.1 CASH ISSUANCE AND CIRCULATION

In total, 6.9 trillion tenge of cash was issued into circulation from the National Bank's reserve funds during 2021, which exceeds the corresponding indicator for

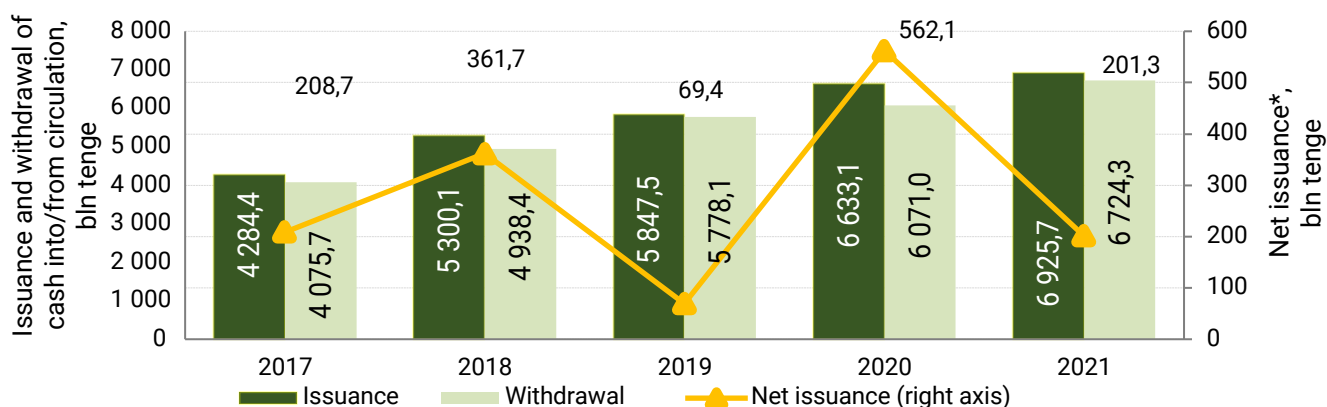
2020 by 292.6 billion tenge, or by 4.4%. The volume of cash withdrawn from circulation increased compared to 2020 by 653.4 billion tenge, or by 10.8%, and amounted to 6.7 trillion tenge. During 2021, the sum of cash in circulation went up by 201.3 billion tenge, or by 6.2%, and at end-2021 equaled 3.5 trillion tenge (Figure 2.2.1.1).

Figure 2.2.1.1 Cash in circulation



The ramp-up in the volume of cash in circulation was driven by the growing volume of retail trade, economic activity of economic entities due to the easing of quarantine measures.

Figure 2.2.1.2 Issuance of cash into circulation and its withdrawal from circulation

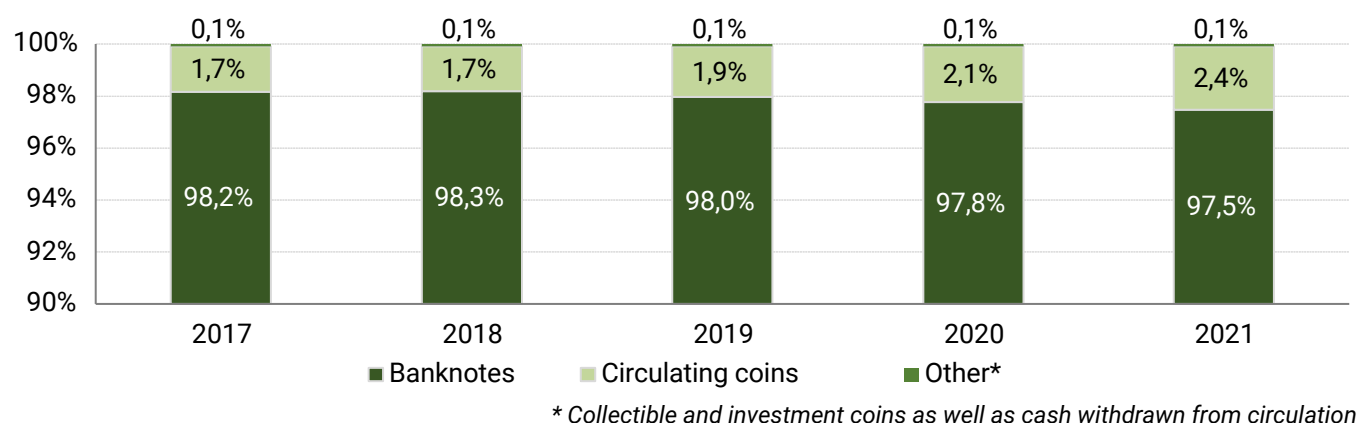


**Difference between issuance and withdrawal of cash from circulation*

Banknotes of the national currency account for the largest portion of cash in circulation. At end-2021, banknotes in circulation amounted to 3.4 trillion tenge, or 97.5% of the total sum of cash in circulation.

The amount of circulating coins was 83.7 billion tenge or 2.4% of the total amount of cash in circulation (Figure 2.2.1.3).

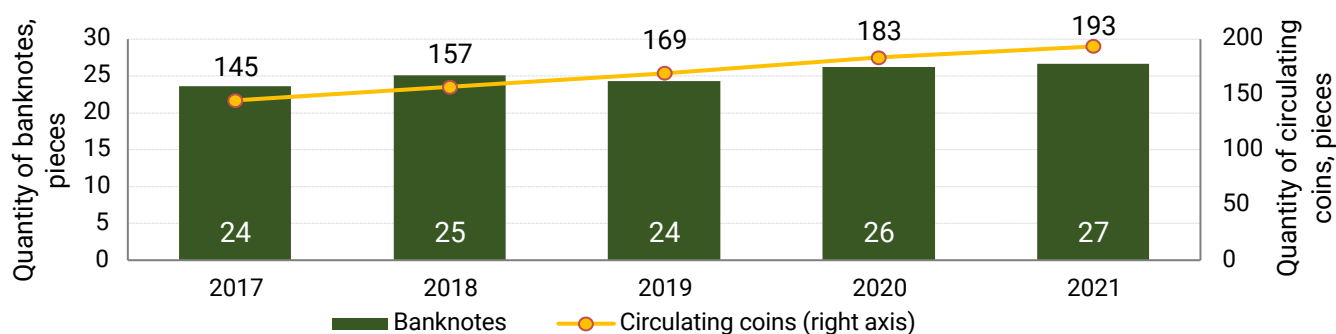
Figure 2.2.1.3 Share of banknotes and coins in circulation



Despite the growing total amount of cash in circulation, the quantity of banknotes per capita demonstrates a stable level. The average quantity of banknotes per capita in the last five years was 25 banknotes. On average, over the last five years the annual growth rate of circulating coins per capita accounted for 8%. At end-2021, the quantity of circulating coins per capita

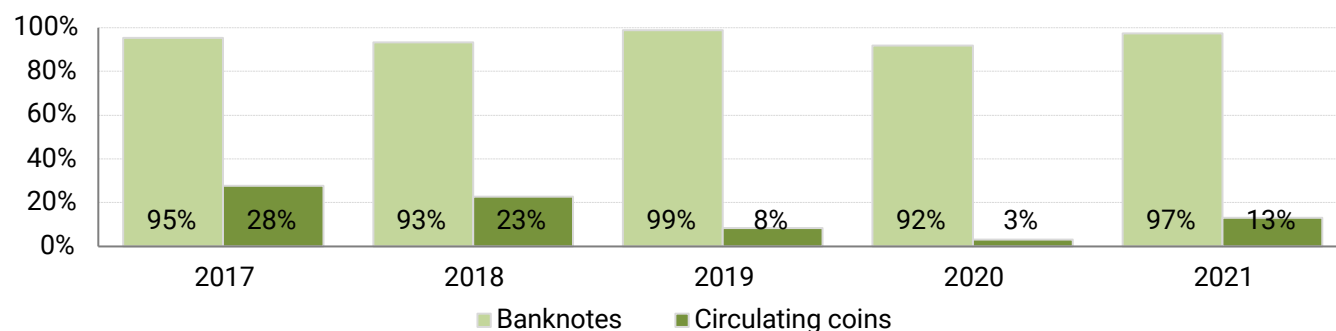
in Kazakhstan was 193 pieces (Figure 2.2.1.4). As of end-2021, given the overall issuance of circulating coins for 16.4 billion tenge, the amount of coins withdrawn from circulation was 2.2 billion tenge, or 13.2% of the total amount issued. Based on the existing demand, the National Bank ensures that the need for circulating coins is satisfied without interruption.

Figure 2.2.1.4 Quantity of banknotes and circulating coins per capita



Over the last five years, the average rate of collection of banknotes to cash desks of the National Bank's branches has been 95% (Figure 2.2.1.5).

Figure 2.2.1.5 Ratio of the withdrawn amount to the issuance



In 2021, the largest share of cash disbursed by banks was to load ATMs with cash (11.7% growth compared to

2020) and to make withdrawals from deposit accounts of individuals (28.5% growth) (Table 2.2.1.1).

Table 2.2.1.1 Cash circulation in banks⁵

Cash Flows through Cash Desks of Banks	During 2021 (billion tenge)	During 2020 (billion tenge)	Change for the Period	
			billion tenge	%
Receipts to bank cash desks	37 980.2	31 122.3	6 857.9	22.0%
from sale of goods, services and works by corporate entities	6 063.9	5 747.1	316.8	5.5%
to deposit accounts of individuals	8 669.3	7 986.8	682.5	8.5%
from foreign exchange sales	5 234.5	4 641.8	592.7	12.8%
from individuals on one-time transfers	262.0	240.0	22.0	9.1%
loan repayments from individuals and corporate entities	519.3	443.9	75.4	17.0%
other receipts	17 231.2	12 062.8	5 168.4	42.8%
Withdrawals from bank cash desks	42 078.5	31 714.4	10 364.1	32.7%
for payment of goods, services and works by corporate entities	2 006.7	1 738.5	268.2	15.4%
from deposit accounts of individuals	9 090.8	7 072.8	2 018.0	28.5%
for foreign exchange purchases	2 093.1	1 544.4	548.7	35.5%
for one-time transfer	74.3	79.2	-4.9	-6.2%
for payments of wages, retirement benefits and allowances	647.1	915.5	-268.4	-29.3%
to load ATMs	19 777.4	17 708.3	2 069.1	11.7%
loans to individuals and corporate entities	352.2	311.2	41.0	13.2%
other withdrawals	8 036.9	2 344.5	5 692.4	242.8%

Modernization and Optimization of Business Processes in Managing the Cash Turnover

At present, the National Bank continues to modernize and optimize business processes for managing the cash turnover in the country.

To accomplish these objectives, the work is underway to build two modern automated cash centers in the cities of Nur-Sultan and Aktobe and introduce automatic identification tools to ensure traceability and digitalization of business processes. In the future, uninterrupted and timely provision of cash to the nearby regions in Kazakhstan will be carried out from three regional cash centers: in the city of Almaty and two projected centers in the cities of Nur-Sultan and Aktobe. The regional cash center in the city of Nur-Sultan will be equipped, among other things, with a gold vault. The main portion of the domestic gold portfolio is planned to be stored in the city of Nur-Sultan.

Currently, pre-design and design work is underway on these facilities, which are scheduled to be completed by the end of 2022. Construction is planned to start in 2023.

Regulation of Maximum Amounts of Cash Withdrawals from Bank Accounts of Business Entities

As part of the National Bank's effort to regulate the procedure of cash withdrawals from bank accounts of business entities⁶, the data was analyzed and processed based on identification numbers of business entities in the context of banks and business entities in order to identify those business entities that exceeded the maximum amounts of cash withdrawals.

During 2021, a total of 2.6 trillion tenge in cash was withdrawn from the bank accounts of business entities (corporate entities and individual entrepreneurs), of which 213.5 billion tenge in cash, or 8.3% of the total amount, was withdrawn in excess of the established limits.

⁵ According to the data from the Report on Operations with Cash as approved by the Board Resolution of the National Bank of the Republic of Kazakhstan dated April 21, 2021 No. 48 "On Amendments to the Board Resolution of the National Bank of the Republic of Kazakhstan dated April 21, 2020 No. 54 "On Approval of the List, Forms and Deadlines of Reports Submitted by the Second-Tier Banks and the Submission Rules""

⁶ Joint NBK's Board Resolution dated December 21, 2020 No. 151, Board Resolution of the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market dated December 22, 2020 No. 125 and the Order of the Minister of Finance of the Republic of Kazakhstan dated December 22, 2020 No. 1223 "On Approval of the Rules for cash withdrawals from bank accounts by corporate entities". Joint NBK's Board Resolution of December 21, 2020 No. 150 and the Order of the Minister of National Economy of December 23, 2020 No. 95 "On Approval of the Maximum Amounts of Cash Withdrawals from Bank Accounts of Business Entities as Well as those Business Entities which are not Subject to the Requirement on Cash Withdrawals from Bank Accounts".

The total amount of cash withdrawals (since June 2020) by corporate entities in excess of the established limits (for payment for goods, services and work performed) did not exceed 15%. During the period from June to December, the following sums were withdrawn: in 2020 – 85.3 billion tenge (7.8%), in 2021 – 125.7 billion tenge (12.3%). The above demonstrates the expediency of setting thresholds for maximum amounts.

According to Complex plan of arrangements to counteract the shadow economy for 2021–2023⁷, in 2022 a joint analysis will be carried out with the Ministry of National Economy of the Republic of Kazakhstan, Ministry of Finance of the Republic of Kazakhstan, Financial Monitoring Agency of the Republic of Kazakhstan (in consultation with the National Chamber of Entrepreneurs of the Republic of Kazakhstan) followed by the development of proposals for updating the limits on the amounts of cash withdrawals by business entities from their bank accounts (completion date – the 1st quarter of 2023).

2.2.2 BANKNOTES AND COINS

On December 1, 2021, the National Bank issued a 20,000 tenge commemorative banknote dedicated to the 30th anniversary of Independence of the Republic of Kazakhstan with unique security features. Thus, for the first time ever in the production of banknotes, a 15 mm wide holographic strip with fixed multifunctional security properties vertically located throughout the entire area of the banknote was inserted into the substrate, with six

security functions all in one. A new generation protective element “SPARK” – “Flow Dimension” with optically variable properties has been also used.

Collectible Coins

In 2021, the catalog of collectible coins for the 30th anniversary of the Independence of Kazakhstan was designed and a mobile application for collectible coins was developed. The electronic version of the catalog will be available in the mobile application after being placed on the Apple Store and Google Play platforms in the 2nd quarter of 2022.

In 2021, 614,277 pieces of collectible coins were minted and issued, of which 1,000 pieces were made of gold, 38,277 pieces of silver, 175,000 pieces of cupronickel alloy and 400,000 pieces of nickel silver alloy.

Since April 2021, in order to ensure the safety of the population given the existing epidemiological situation, the sale of collectible coins is carried out exclusively through an online store using a new platform www.kazcoins.nationalbank.kz.

Forensic Analysis of Banknotes and Coins

During 2021, the National Bank conducted forensic analysis of 3 393 suspicious currency notes for 11.1 million tenge (3 387 banknotes and 6 coins) (Table 2.2.2.1).

Table 2.2.2.1 Forensic analysis of suspicious currency notes for 2020–2021

Forensic analysis of suspicious currency notes	for 2020		for 2021	
	quantity, pieces	amount, tenge	quantity, pieces	amount, tenge
Recognized as counterfeit	313	1 230 700	199	729 300
Recognized as invalid	824	1 756 400	472	1 419 600
Recognized as having production defect	1	20 000	5	6 000
Recognized as valid and exchangeable	1 069	6 192 900	2 717	8 922 200
Total	2 207	9 200 000	3 393	11 077 100

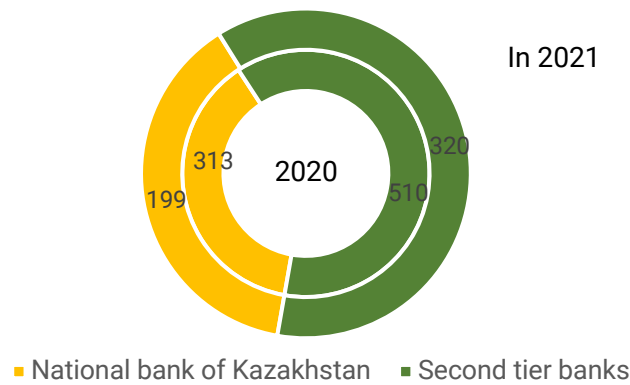
During 2021, the National Bank and banks had detected 519 counterfeit currency notes in the amount of 1 577 400 tenge, including 513 banknotes and 6 coins

(Figure 2.2.2.1). In 2021, the quantity of counterfeit currency notes decreased by 37% compared to 2020 (823 counterfeit currency notes) (Figure 2.2.2.2).

⁷ The Government Decree of the RK of September 21, 2021 No. 644.



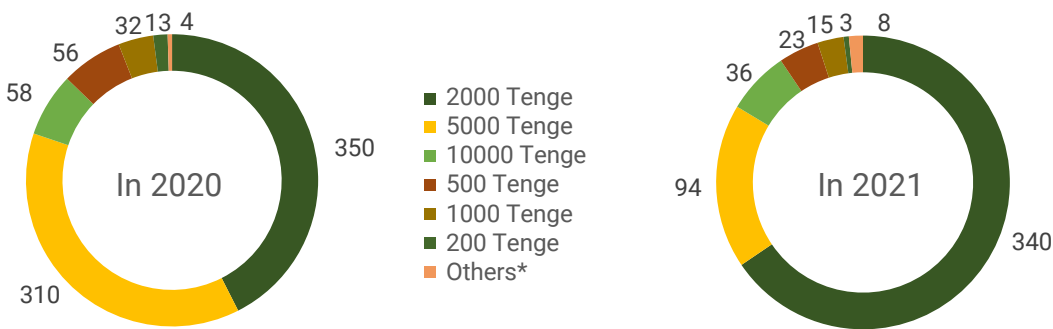
Figure 2.2.2.1 Counterfeit currency notes detected during 2020–2021 (quantity, pieces)



In 2021, the largest quantity of counterfeit banknotes was detected in the city of Almaty – 355 banknotes, or 68% of the total quantity of detected counterfeit banknotes. In other regions, there were 164 counterfeit banknotes or 32% of the total quantity of detected forged notes. As at end-2021, there were approximately

1.03 forged banknotes per one million of authentic banknotes in circulation. This number is considered as a low level of counterfeiting as compared to other countries (in the European Union countries – 15 counterfeit banknotes, in the Russian Federation – 7 counterfeit banknotes).

Figure 2.2.2.2 Counterfeit currency notes detected during 2020–2021, by denomination (quantity, pieces)



* – The “Others” category includes the data on 50, 100 and 20 000 tenge

2.2.3 BULLION COINS AND MINTED BARS FROM REFINED GOLD

The program on purchase and sale of minted bars from refined gold for the population was launched by the National Bank in 2017. Gold bars are realized via banks (Halyk Bank, Eurasian bank, Jýsan Bank, Bank CenterCredit) and some organizations authorized to conduct operations with foreign cash (exchange offices).

In 2021, banks and non-bank exchange offices had realized 32 326 minted bars with the total weight of 1.1 ton, an increase of 53% compared to 2020.

Gold bars are presented in five categories: 5, 10, 20, 50 and 100 grams. In 2021, the most popular gold bars among the buyers were the bars with the weight of 10 grams (the share of the total volume of sales in 2021 is 29%), followed by 100-gram bars (21%) and 5-gram

bars (19%), 50-gram bars (16%), and 20-gram bars (15%). Mainly, minted bars are popular in the cities of Almaty, Nur-Sultan and Atyrau.

Altogether, from the start of sales of minted bars from refined gold to the population, 74 905 gold bars with a total weight of 2.7 ton were sold, 10 886 minted bars with a total weight of 266 kilograms were repurchased which accounts for 15% of the total volume of realization of minted bars. Virtually all minted bars accepted for repurchase are sold to the population without their return to the National Bank’s branches.

The issuance of National Bank’s bullion coins “ALTYN BARYS” and “KÚMIS BARYS” commenced from November 2009 with different weighting characteristics. Bullion coins are sold and accepted for repurchase via the National Bank’s branches.

During 2021, the National Bank's branches sold the following bullion coins to the population: from gold – 1 836 coins with the weight of 40.4 kg, from silver – 4 700 coins with the weight of 502.4 kg, an increase of 80.7% and 135.2%, respectively. Overall, 29 825 gold bullion coins with the weight of 1.1 tons and 49 442 silver coins with the weight of 6.0 tons had been realized since 2009.

Gold bullion coins "ALTYN BARYS" are issued in 10 tenge (3.11 g), 20 tenge (7.78 g), 50 tenge (15.55 g), 100

tenge (31.1 g), 200 tenge (62.2 g) and 500 tenge (155.5 g) denominations. Silver bullion coins "KÚMIS BARYS" are issued in 1 tenge (31.1 g), 2 tenge (62.2 g), 5 tenge (155.5 g) and 10 tenge (311 g) denominations. In 2021, the most popular among gold bullion coins were those of 10-tenge denomination (39.4%), and among silver coins – 1 tenge denomination (42.2%). Bullion coins are popular mainly in the cities of Almaty and Nur-Sultan.

2.3 CURRENCY EXCHANGE REGULATION AND CURRENCY CONTROL

There is a liberal regime of currency exchange regulation in the Republic of Kazakhstan, which conforms to the commitments undertaken by the government within the framework of membership in the IMF, the EAEU and other international associations and envisages a free conduct of foreign economic transactions.

The National Bank took an active part in implementing the Comprehensive Plan to reduce transactions with offshore jurisdictions of the Republic of Kazakhstan for 2020–2021, in amending the Government of Kazakhstan's Decree "On Certain Aspects of Activities of Quasi-Government Sector Entities", whereby entities of the quasi-government sector are obliged to continue selling a part of their foreign exchange proceeds in the domestic foreign exchange market.

In order to monitor the due fulfillment by banks of the requirement to resell the previously purchased foreign exchange, off-site supervision of banks was carried out on a weekly basis.

The Board Resolution of the National Bank dated December 20, 2021 No. 113 "On amendments to the resolutions of the Board of the National Bank of the Republic of Kazakhstan dated March 30, 2019 No. 40 "On approval of the Rules for conducting foreign exchange transactions in the Republic of Kazakhstan" and the Resolution dated March 30, 2019 No. 42 "On approval of the Rules for the Implementation of export and import currency control in the Republic of Kazakhstan" made amendments and additions in order to update the outdated reference rules on currency exchange regulation, by bringing procedures for export and import currency control in line with the Administrative Procedure Code of the Republic of Kazakhstan, as well as amendments were made regarding the use

by an authorized bank of information from the digital documents service for customer identification.

As part of the ongoing work with the "Astana" International Financial Center in the field of currency exchange regulation, the Rules for currency exchange regulation and the provision of information on foreign exchange transactions conducted in the "Astana" International Financial Center were signed.

In 2021, 3,482 account numbers were assigned within the framework of record registration of foreign exchange contracts on the movement of capital and notifications about accounts in foreign banks.

Export proceeds are the main source of foreign exchange in the domestic foreign exchange market of Kazakhstan, therefore the currency legislation establishes the requirement to repatriate proceeds from exports of goods (works, services) and repay the advance payment for imports of goods (works, services) unused by a non-resident to the bank accounts with Kazakhstani banks. The period during which the currency should be repatriated is determined based on the terms and conditions of a foreign exchange contract on exports or imports.

In 2021, 80 646 foreign exchange contracts on exports or imports were assigned registration numbers, of which: on exports – 21 462, on imports – 59 184. The main part of registration numbers on foreign exchange contracts was assigned to goods; however, their share in 2021 decreased compared to 2020 and amounted to 77% of the total quantity of registration numbers on foreign exchange contracts. At the same time, the share of exports of services is growing being associated with the mainstreaming of the program for exports of services.



In 2021, as part of the currency exchange control, the National Bank detected administrative offenses in the area of currency exchange legislation and initiated 1 124 cases of administrative offense, of which penalties were imposed on 1064 cases, some of which in the form of warnings – 912,; penalties were imposed on 152 cases by the National Bank (82) and by courts (70) in the amount of 233.1 million tenge and 40 cases were discontinued. Also 7 scheduled inspections of authorized banks and 1 414 documentary inspections were conducted in 2021, which resulted in 80 warning reports; administrative penalties in the form of fines were imposed totaling over 215.8 million tenge.

In 2022, the National Bank will continue to elaborate measures required to intensify effectiveness of the currency control and counteract the capital outflows, by collecting and analyzing data obtained within the framework of currency exchange legislation of the Republic of Kazakhstan and by analyzing doubtful foreign exchange transactions.

Organization of Exchange Transactions with Foreign Cash and Control and Supervision of the Exchange Office Operations

As part of licensing activities in respect of exchange operations with foreign cash, in 2021 the National Bank issued 31 licenses of new authorized organizations (non-bank corporate entities), and 28 licenses were surrendered on a voluntary basis.

As of end-2021, 312 authorized organizations had valid licenses for organization of exchange operations with foreign cash, 2150 exchange offices including 1482 bank exchange offices, 449 exchange offices of authorized organizations and 219 exchange offices of the “KazPost” JSC were operating in the country.

In 2021, amendments were made to the Rules of Exchange Operations with Foreign Cash in the Republic of Kazakhstan⁸ (the “Rules No. 49”), which were brought in conformity with the Financial Action Task Force Recommendations:

1) a limitation was made as to participation in the authorized capital of persons who were previously founders (members) of authorized organizations in respect of which the National Bank’s inspection was not completed due to the voluntary surrender of the license and annex to the license, prior to the expiration of 3 years from the date of termination of operations of such organizations included in the list of organizations and persons involved in financing the proliferation of weapons of mass destruction, persons registered in

foreign states and (or) parts of the territories of foreign states that are characterized as offshore zones, included in the list of states (territories) that do not implement or insufficiently implement the FATF recommendations;

2) the management of authorized organizations was limited in relation to persons without university education who are on the list of organizations and persons associated with the financing of terrorism and extremism and (or) financing the proliferation of weapons of mass destruction, in accordance with the Anti-Money Laundering and Anti-Terrorist Financing Law, in respect of which there is a court decision on the application of criminal punishment in the form of deprivation of the right to hold the position of an executive officer in a financial organization, a bank and (or) insurance holding company and be a major participant (major shareholder) of a financial organization.

In addition to the above amendments, within the framework of expanding the National Bank’s capacity to protect the rights and legitimate interests of consumers of services of exchanging foreign cash as well as to determine the scale of the shadow turnover of foreign cash and fine-tune the policy governing such operations, Rules No.49 were amended with regard to increasing the storage period of video recordings in exchange offices from 30 to 90 calendar days and providing an opportunity for clients of exchange offices to conduct exchange transactions with foreign cash based on the data from the digital document service.

In 2021, the National Bank conducted 165 inspections of authorized organizations in respect of compliance with currency exchange legislation of the Republic of Kazakhstan, legislation on counter-acting the money laundering and terrorism financing as well as inspections regarding the bookkeeping including 152 inspections of entities identified based on the risk assessment. Inspections of currency control-related matters were conducted on the basis of risk-focused approach.

Based on the results of inspections, 94 cases of administrative offence were initiated. Reprimands were administered on 91 cases, 30 of which were in the form of warnings. The amount of penalties imposed by the National Bank and courts in respect of 61 cases made up about 25 million tenge. In addition to the above, 80 supervisory response measures were taken against authorized organizations and two sanctions in the form of revocations of license for exchange operations with foreign cash were imposed on these organizations.

⁸ Boars Resolution of the Board of the National Bank of the Republic of Kazakhstan dated April 4, 2019 No. 49 “On Approval of the Rules for Exchange Operations with Foreign Cash in the Republic of Kazakhstan”.

In 2021, seven banks were examined for compliance with requirements to exchange operations with foreign cash.

Based on the results of inspections, warnings were issued in respect of 4 banks, and 6 banks were required to eliminate violations detected in the course of inspection.

As part of the work on preparing the Republic of Kazakhstan for the second round of the Mutual Evaluation of the Eurasian Group on Combating Money Laundering and Terrorism Financing, in order to obtain positive results on FATF, in 2021 participation in field meetings was taken as part of a project to identify and assess the risks of money laundering and terrorism financing in the Eurasian region and the project group for conducting a regional assessment of ML/TF risks, also in filling out questionnaires on the technical compliance of the policy of regulating the activities of authorized (non-bank exchange offices) and cash collection organizations within the framework of the project “Improving the mechanisms of a risk-focused approach to supervisory activities” and in the preparation of an opinion regarding the draft Report on the National Risk Assessment in the field of anti-money laundering on

the draft Decree of the Government of the Republic of Kazakhstan “On approval of measures aimed at reducing the risks of money laundering and terrorism financing”.

In accordance with the Law of the Republic of Kazakhstan dated November 18, 2021 No. 73-VII “On Amendments to some Legislative Acts of the Republic of Kazakhstan on Counteracting Money Laundering and Terrorism Financing”, the National Bank is assigned a new mandate to independently adopt the requirements to the Internal Control Rules in order to counteract the money laundering and terrorism financing (the “Internal Control Rules”) in relation to authorized organizations.

In this regard, in 2022, the National Bank will proceed with its effort to develop and harmonize the Internal Control Rules, taking into account recommendations of the expert assessors of the Eurasian Group on Combating the Money Laundering and Terrorism Financing, which determine the degree of technical compliance of the legislation in the field of combating money laundering and terrorism financing with the FATF recommendations⁹ and effectiveness of the national financial monitoring system.

⁹ 40 recommendations and 9 special recommendations of the FATF (Financial Action Task Force)



2.4 ASSET MANAGEMENT

2.4.1. MANAGEMENT OF THE NATIONAL BANK'S GOLD AND FOREIGN EXCHANGE ASSETS

Gold and foreign exchange reserves of the National Bank are created for ensuring the internal and external stability of the national currency out of the National Bank's assets, which have high liquidity in the international markets. As of end-2021 gross gold and foreign exchange reserves of the National Bank amounted to 34.4 billion US dollars, which is by 1.2 billion US dollars, or 3.4%, larger than at the end of 2020.

The decline in the National Bank's gold and foreign exchange reserves was affected by changes in the volume of the liquidity portfolio of gold and foreign exchange assets, specifically, the external debt payments, foreign exchange interventions and other operations on accounts of the Government of the Republic of Kazakhstan.

The National Bank manages gold and foreign exchange assets in accordance with the Investment Strategy for Management of the National Bank's Gold and Foreign Exchange Assets (Figure 2.4.1.1, Table 2.4.1.1).

Figure 2.4.1.1 Structure of gold and foreign exchange assets of the National Bank

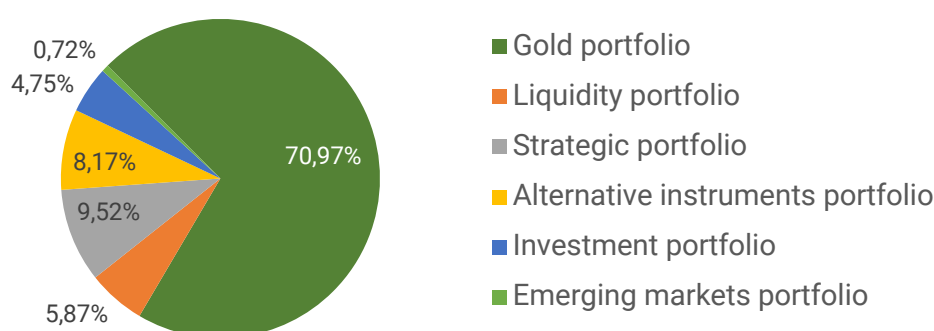


Table 2.4.1.1 Portfolios market values as of end-2021

Portfolio	Market values, billion US dollars
Investment portfolio	1.59
Strategic portfolio	3.19
Gold portfolio	23.75
Emerging markets portfolio	0.24
Liquidity portfolio	1.96
Alternative instruments portfolio	2.73

Purposes of the investment portfolio are to ensure asset integrity and to increase their profitability in the near and medium term perspectives. Assets in the portfolio are invested in the developed market government bonds and have the following structure: in the US dollars – 62.0%, Euro – 12.5%, British pounds – 12.5%, Australian dollars – 8.0%, Canadian dollars – 5.0%.

In 2021, the return on the investment portfolio expressed in terms of the currency basket was (-)0.07%, and the return on the benchmark portfolio was (-)0.46%.

The return on the investment portfolio expressed in the US dollars accounted for (-)1.50%, while the return on the benchmark portfolio was (-)1.89%.

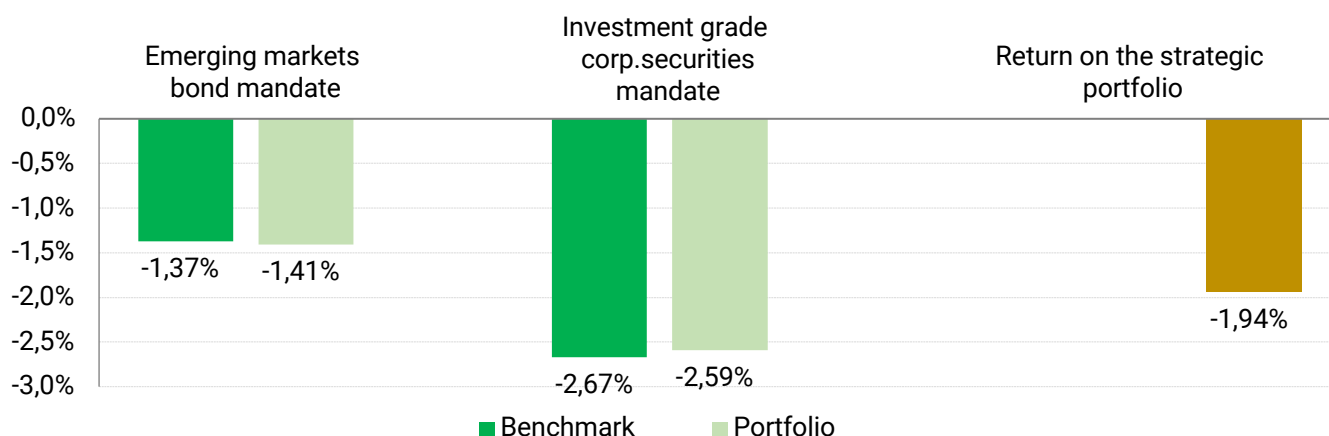
As a result, the investment portfolio showed up a positive difference between the actual returns and the return on the benchmark portfolio (excess return¹⁰) of 39.0 basis points expressed both in terms of the currency basket and in the US dollars.

¹⁰ The difference between the actually achieved level of profitability and the level of profitability of the reference portfolio

The purposes of the strategic portfolio are to provide a return on assets in the medium- and long-term perspectives and to diversify gold and foreign exchange assets.

In 2021, the return on the strategic portfolio made up (-)1.94% (Figure 2.4.1.2).

Figure 2.4.1.2 Returns on the strategic portfolio mandates



Funds in the emerging markets portfolio have been invested into assets denominated in the Chinese Yuan. In 2021 the return on portfolio in the Chinese Yuan had been at 3.84%, and in the US dollars – at 6.56%.

The liquidity portfolio of gold and foreign exchange assets is held for conducting money market operations for the purpose of monetary policy implementation, for maintaining a high level of liquidity as well as for servicing the government's external debt.

Generation of excess returns is not the purpose of the liquidity portfolio asset management.

The alternative instruments portfolio is held for diversification and increase in return on gold and foreign exchange assets in the long term. Assets in this portfolio may be invested into such areas as private capital, hedge funds, and funds of funds, real estate, infrastructure and equities. In 2021, the return on the alternative instruments portfolio made up 20.24%.

The gold portfolio consists of the internal gold and external gold; assets in this portfolio are also placed on deposits with maturity up to one year. Assets in gold are managed with a view to ensure integrity and to have a cushion against a possibility that attractiveness of foreign currency assets in the international financial markets would go down. In 2021 the return on the gold portfolio in the US dollars was (-)3.8%. The return on the gold portfolio placed with deposits accounted for

0.05% in the troy ounce, and in the US dollars – for (-)3.7%.

2.4.2 MANAGEMENT OF THE NATIONAL (OIL) FUND'S ASSETS

Ensuring the long-term profitability of the National Fund's assets provides for short-term fluctuations in profitability; the returns are calculated in the National Fund's base currency – the US dollars.

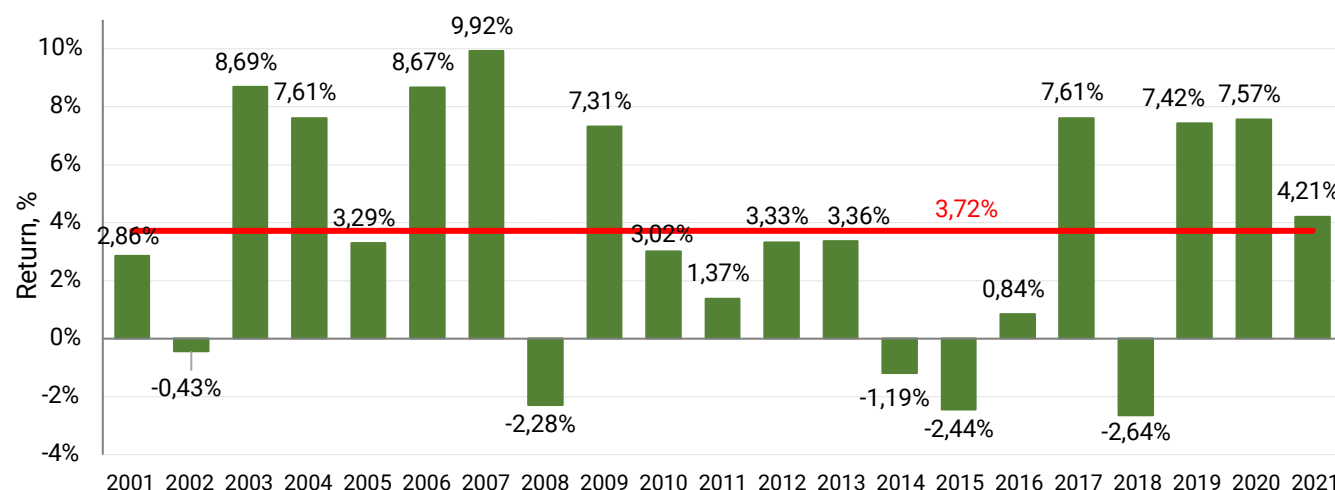
According to the National Fund's main goal and functions, its structure is made up of the stabilization portfolio and savings portfolio.

The total market value of the National Fund's portfolio at the end of 2021 was 59.5 billion US dollars, including the volume of foreign currency portfolio of 55.3 billion US dollars.

Market values of the stabilization and savings portfolios within the foreign currency portfolio of the National Fund equaled 4.9 billion US dollars (8.84%) and 50.4 billion US dollars (91.16%), respectively.

Return on the National Fund since its inception until December 31, 2021 made up 112.00%, in annual terms – 3.72% over the last five years – 26.16%, in annual terms – 4.76%, over the last ten years – 30.98%, in annual terms – 2.74% (Figure 2.4.2.1). The return on the National Fund's portfolio in 2021 accounted for 4.21%.

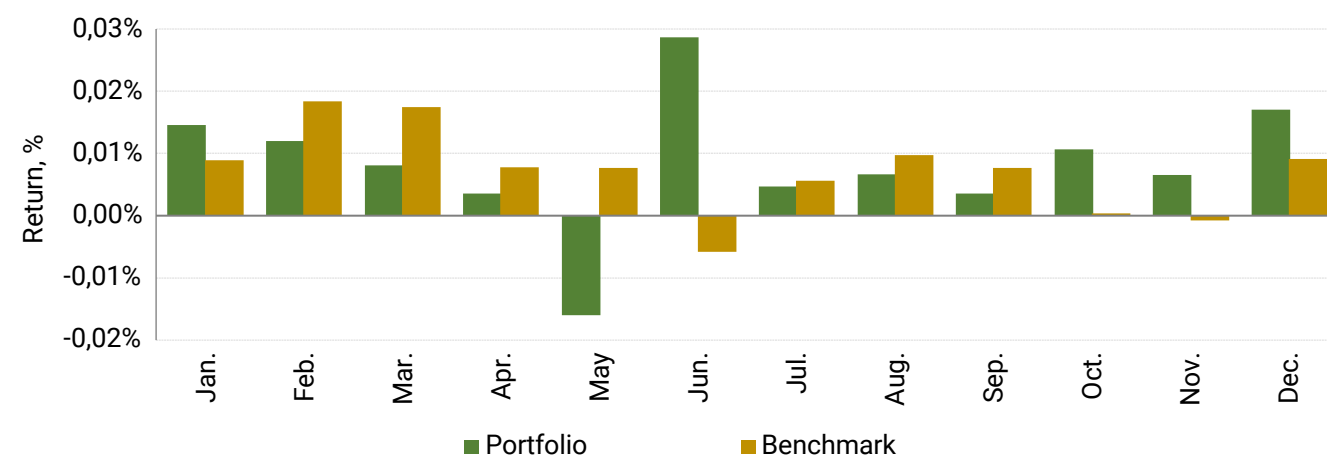
Figure 2.4.2.1 Return on the National Fund's portfolio in the US dollars



In 2021, assets in the stabilization portfolio under own management were invested into the money market instruments and fixed income securities, mainly US Treasury securities.

Return on the stabilization portfolio from January 1 to December 31, 2021 made up 0.10%, during the same period, the return on the benchmark portfolio (Merrill Lynch 6-month US Treasury Bill Index) accounted for 0.09%.

Figure 2.4.2.2 Return on the stabilization portfolio in 2021



The total return on the savings portfolio in 2021 made up 4.53%.

The return on the "Developed markets government bonds" mandate management from the beginning of the year to December 31, 2021 was (-)3.32%. The return on the benchmark portfolio made up (-)3.53%.

As part of the work to protect the National Fund's assets in foreign jurisdictions, the Belgian Court of Appeal found the actions of the Stati party unlawful, and the decision of the lower court to award and enforce the award in the amount of 530 million US dollars was canceled. On November 26, 2021, frozen assets as well

as the accrued interest totaling about 536 million US dollars were withdrawn from BNY Mellon accounts.

In order to further improve the asset management strategy of the National Fund, the National Bank prepared the following proposals: introducing ESG factors in the investment process; using factor investment; an equity portfolio hedging; using the portfolio rebalancing from 2023 following the transition to a new strategic asset allocation. These proposals were considered and approved on December 7, 2021 at the meeting of the Supreme Council under the President of the Republic of Kazakhstan on reforms.

2.4.3 MANAGEMENT OF PENSION ASSETS OF THE UNIFIED ACCUMULATIVE PENSION FUND

As of end-2021 the total amount of pension assets of the Unified Accumulative Pension Fund under fiduciary management of the National Bank made up 13.0 trillion tenge, or 99.8% of pension accumulations, having increased during 2021 by 1.2% due to early withdrawals (Table 2.4.2).

Table 2.4.2 Structure of pension assets investment portfolio of the Unified Accumulative Pension Fund under fiduciary management of the National Bank

Item	Present value at January 1, 2021, billion tenge	Share at January 1, 2021, %	Present value at January 1, 2022, billion tenge	Share at January 1, 2022, %	Change over the period, %
Government securities of the Republic of Kazakhstan	5 730.1	44.4	5 104.8	39.1 %	-10.9 %
Securities of issuers of the Republic of Kazakhstan	3 636.5	28.2	3 165.9	24.3 %	-12.9 %
Securities of foreign issuers	2 138.7	16.6	2 922.8	22.4 %	36.7 %
Deposits with banks of the Republic of Kazakhstan	251.7	2.0	251.7	1.9 %	0.0 %
Deposits with foreign banks	282.9	2.2	0.0	0.0 %	-100.0 %
Cash on investment accounts	12.0	0.1	434.8	3.3 %	3 523.0 %
Assets under external management	816.5	6.3	1 382.5	10.6 %	69.3 %
Other assets	26.3	0.2	215.7	1.7 %	720.3 %
Total	12 894.6	100.0	13 046.6*	100.0 %	1.2 %

*- Including liabilities payable on made transactions in the amount of 431.6 billion tenge.

Pension assets are invested based on the market conditions into various types of Kazakhstani and foreign financial instruments. On the local securities market, pension assets are invested in accordance with the investment areas approved by the Council for

Management of the National Fund of the Republic of Kazakhstan. The total investments in the domestic financial market amounted to 370.6 billion tenge (Table 2.4.3).

Table 2.4.3 Investments based on investment areas approved by the Council for Management of the National Fund of the Republic of Kazakhstan for 2021

Investments	Volume, billion tenge
Government securities of the Republic of Kazakhstan issued by the Ministry of Finance of the Republic of Kazakhstan	318.5
Bonds issued by banks of the Republic of Kazakhstan	52.1
Total	370.6

Pension assets denominated in foreign currency are invested in accordance with the new target strategic allocation defined by the Investment Declaration of the Unified Accumulative Pension Fund. As of end-2021, the structure of foreign currency portfolio of pension assets was brought in line with the strategic allocation. Thus, as of January 1, 2022, the share of bonds of developed countries was adjusted to 25.0%, emerging markets bonds – to 16.2%, corporate bonds – to 15.7%, and equities – to 13.9%.

Order to increase and diversify the return on pension assets, the step by step transfer of the foreign currency part of the portfolio under the management of the foreign asset managers continued in 2021. An overall volume of transferred assets was 1.0 billion US dollars, including 600.0 million US dollars under the "Global Equities" mandate and 400 million US dollars under the "Corporate investment-grade bonds" mandate. As a result the share of foreign currency assets under external management increased from 6.3% to 10.6% of the total amount of pension assets (1 382.5 billion tenge, or 3.2 billion US dollars) during 2021.



As of end –2021 the accrued investment return on pension assets of the Unified Accumulative Pension Fund amounted to 1 398.9 billion tenge, which is by 136.4 billion tenge, or 10.8% more than in 2020.

“Net” investment return distributed to accounts of contributors of the Unified Accumulative Pension Fund amounted to 1 357.7 billion tenge. The main source of investment return was the interest received on financial instruments (62.4%). The amount of pension contributions amounted to 1 341.9 billion tenge.

The number of processed applications of contributors for early withdrawal of pension accumulations made up

879,100 for 2.6 trillion tenge, of which: 2.5 trillion tenge, or 94.9% was withdrawn to resolve housing issues, 126.5 billion tenge (4.8%) was used for medical treatment and 7.2 billion tenge (0.3%) was transferred to management companies.

Despite the high volatility in the financial markets caused by the COVID-19 pandemic, the return on pension assets distributed to accounts of contributors (recipients) of the Unified Accumulative Pension Fund in 2021, including early withdrawals, accounted for 11.1% against the inflation rate of 8.4%. In real terms the return was 2.7% (excluding inflation).

2.5 STATISTICAL ACTIVITIES

From January 1, 2020, with the start of functioning of the competent authority in charge of regulation and development of the financial market, the National Bank has been collecting reports from the financial market entities also for supervisory purposes. Combining the information needs of two government agencies – the National Bank and the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market, allows eliminating duplication of data collection for statistical, analytical and supervisory purposes, reducing the administrative burden on the business without losing the quality and depth of the data analytics, and also encourages the development of new technologies for data transmission and information exchange in the financial market.

In 2021, the National Bank completed the decommissioning of outdated information systems for report collection from the financial market entities and made the transition to a unified platform for collecting and processing data focused on accepting both traditional “matrix” reporting forms and collecting granular data. The implementation of a data-centric approach improves the quality of generated statistics and analytics and creates conditions for the automation and digitalization of statistical activities, analytics and surveillance business processes, ensuring a high level of their transparency.

As part of optimization of reports submitted by the financial market entities to the National Bank, in 2021, the work was carried out to transfer part of the second-tier banks’ reports from the “matrix” forms to collection of granular indicators that combine the objectives of statistics and supervision, and to transfer statistical data collected from the second-tier banks to the category of administrative data. This enabled to exclude the collection of duplicating indicators, reduce 9 reporting forms for the second-tier banks and provide the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market with access to the full set of collected data.

The work that was started in 2020 to implement the concept of a “single window” for collecting data from the financial market entities was continued. Along with the development of the National Bank’s web portal, efforts were made to ensure a unified data format, unified directories and methodology, timing and frequency of data submission and integration with various databases, including government databases. This work enabled to increase transparency of the process of statistical data production, improve its quality and ensure efficiency in making management decisions.

Monetary and Financial Statistics

Macroeconomic financial statistics include monetary statistics formed by the National Bank in accordance with the International Monetary Fund's methodology and the macroeconomic statistics of the financial market on sectorial distribution.

The National Bank's own data as well as departmental statistical observations and administrative data received by the National Bank from the financial market entities serve as the sources of data for the formation of national monetary and financial statistics.

In 2021, the main aspect in the formation of monetary and financial statistics had been the migration to the data-centric format of administrative report collection, which had provided the required productivity both for the purposes of control and supervisory function and for the statistical data publication. In December 2021, the National Bank made a publication on the credit and deposit market based on new sources of data; the statistics on bank loans to individual entrepreneurs – small- and medium-sized entities – was published for the first time.

At the same time, in order to proceed with expansion of submitted statistics on bank lending from the financial market entities, the National Bank will start to post on its internet resource the information about large, medium-sized and small business entities that will become a follow-up of the work carried out in 2021.

In dealing with the integration associations, the National Bank is in the ongoing cooperation with the Eurasian Economic Commission as regards the methodological work and provision of information on the monetary statistics in accordance with the approved formats and deadlines.

Along with the statistical information, the National Bank publishes on its Internet resource the methodological commentaries, which provide insight into key principles and approaches to the generation of the monetary statistics data.

External Sector Statistics

In 2021, the National Bank, in transition to the seventh edition of the Balance of Payments Manual (BPM7), prepared comments and summary to the initiatives of the IMF editorial board and the Current Account Task Team, Balance of Payments Task Team (BPTT), and the Joint Financial and Payments Systems Task Team (FITT)).

In order to improve the quality of statistics, a survey of individuals making international money transfers was conducted. The survey involved 12 banks, through which the largest volumes of such transfers were carried out in 2020. The results of the survey will be used to revise the estimate of the balance of payments item "Personal transfers", which includes all current transfers between resident individuals and non-resident individuals.

In order to expand the analytical presentation of statistics on foreign trade in goods, the UN international classification by broad economic categories at the level of 6 digits of the EAEU Commodity Nomenclature of Foreign Economic Activity (previously at the level of 4 digits) for food, investment and interim imports was implemented.

In accordance with the Methodology for the formation of a sampling population for conducting a sample survey on the Balance of Payments that was approved in 2020, lists of respondents for the collection of statistical reports for 2022 by the National Bank's regional branches were prepared. The lists will be updated on an annual basis. The main advantages of using the sampling method are specifying the circle of respondents, reducing the time for statistical work, relieving the information load of respondents, saving labor costs, material and financial resources during statistical work and cutting down the number of registration errors, since when the volume of the observed population is reduced, the more professionally trained staff is involved.

Developing the Report Gathering Functionality

As part of the implementation of direct data load tools, in 2021 the following initiatives were successfully implemented: (1) a pilot project for uploading transactional data on securities transactions of



the “Central Securities Depository” JSC to the National Bank Data Warehouse and (2) developing appropriate data marts. The project implementation will significantly reduce the burden on respondents and increase the efficiency of obtaining and working with the data. In the future, there is a plan to scale up a similar project to other participants in the financial market.

Along with the development of technological platforms for collection and processing of data from the financial market entities, a number of measures had been taken in 2021 in the field of optimization of methodological requirements.

In 2021, the National Bank introduced new forms of administrative bank reports that combine the needs of supervision and publication of statistical data and are focused on collection by using a new data collection platform, which significantly reduced the burden on respondents.

In addition, the Bank continued with convergence and unification of indicators of credit information to

implement the tasks of the National Bank’s “Credit Register” and the Credit History Database maintained by credit bureaus, the concept of technological implementation of the “Single window/gateway” for collection of credit information was developed.

Due to the COVID-19 pandemic and the activation of the National Bank’s distant working mode, new information protection standards were adopted and organizational, legal and technical measures were prescribed to ensure the identity of protection tools used by the parties-users of protected information.

The National Bank will continue to work on the development of the Business Database of the Financial Market Entities, including in cooperation with the competent authority in charge of regulation and development of the financial market, credit bureaus and supervised organizations, which will facilitate the use of modern analytical tools, increase the depth of research and expand the potential for application of innovations and up-to-date technologies of regulation.

2.6 DEVELOPING FINANCIAL TECHNOLOGIES AND CYBERSECURITY

With a view to implement the Concept for Development of Financial Technologies and Innovations for 2020–2025, during 2021 the National Bank carried out a number of the following activities.

As part of the “Cooperation in the field of financial technology development” line of activities, a cross-border pilot project on open information APIs was completed in the EAEU space. In the period from May to September 2021, participants in the pilot project in test mode exchanged information about the location and work schedule of client offices, ATMs and exchange rates of national currencies by developing and publishing an API under a common standard. As a result, the methodology was developed for using open APIs in the framework of cross-border communication between participants among the EAEU countries.

The National Bank implemented universal APIs (web services) of the “Unified Indicator Collection System” automated information system and the “Financial Regulatory Statistical Indicators” automated information sub-system for fast integration of the National Bank with the market participants. Web services (APIs) are an alternative way for respondents to submit reports automatically.

Also, the work to develop the Concept for Development of Program Interfaces (Open API) by 2021 – 2023 was initiated, which lays down such basic lines for the development of the Open API as measures for aligning the regulatory environment for the Open API functioning, requirements for the functioning of the Open API in the financial industry of Kazakhstan, common elements of the Open Banking infrastructure for the market participants in order to reduce industry costs as well as the development of a roadmap for implementation of the Open Banking and Open API in the financial market.

As part of the automation of investment management business processes, the application of best practices in the market as well as in order to increase the efficiency of asset management, the National Bank implemented the asset and risk management system that provides end-to-end digitalization of asset management processes.

As a result, optimization of labor costs in the preparation of investment reports, reduction of paper workflow between departments when making investments, the increased efficiency of collecting and presenting information as well as the buildup of a platform for

implementation of machine learning and artificial intelligence systems are expected.

This will allow improving the efficiency of investment asset management in the National Bank and expand the analytical potential, which will ultimately help increase the return on managed assets.

In 2021, the National Bank worked on the acquisition and implementation of a new electronic document management system “Documentolog” based on the National Bank’s infrastructure (under the PaaS model), which enables to provide electronic document exchange with the financial market participants. This system had been put into commercial operation from March 11, 2021 and is integrated with the Single e-Workflow System of government agencies, Unified accounting of appeals of individuals and the Cloudbased Document Management of Government Agencies.

As part of implementation of the Unified platform for collecting reports from the financial market entities, works on transferring the functionality of outdated local subsystems for data collection and processing to new platforms were performed. The migration of historical data in the “Data Warehouse” automated information subsystem was also accomplished in the period from January to December 2021.

At the same time, the work on the construction of an updated technological platform “Data Warehouse” and new data models has been initiated. In addition, the works on the pilot project “NBK Data Factory” for building an infrastructure for full-cycle data collection, storage and processing started to be implemented in terms of the creation and visualization of high-precision information for economic research by designing trackers, dashboards, and analytical reports.

Besides, the National Bank makes an effort to automate internal business processes in the bank and its subsidiaries with an aim to implement the National Bank’s Digitalization Program for 2021–2022.

Thereby, at the National Bank’s premises in the town of Kokshetau, the Data Processing Center was launched as a geographically distributed backup computation center to back up critical IT services. The setting and checkup of engineering systems in the server room of the Data Processing Center in Kokshetau and initiation of their operability for a preliminary run were performed. Additionally, a site for the restoration of critical business processes of the National Bank with built-in reserve workstations was arranged.

The pre-project works for automation of processes of enterprise resource planning (ERP) were commenced. The main objective of the ERP system is the digitalization of business processes to achieve the goals of the organization, based on optimal planning and use of resources. Taking into account international business practices, as part of the pre-project work, top-level functional requirements were developed for the digitalization of business processes for managing cash turnover and personnel, and the marketing analysis of ERP systems was carried out based on Gartner ratings.

As part of the budgeting and procurement business processes, the works on the implementation of the RPA (Robotic Process Automation) technologies were initiated. In order to robotize business processes of the National Bank, in 2021 the marketing analysis of potential suppliers of the RPA systems was performed and the efforts to acquire the RPA technology was made.

In accordance with the instructions from the Head of State, the National Bank approved the Concept for building a unified technological platform for collection, monitoring and response to cyber incidents in the financial sphere.

In building a unified technological platform, the National Bank implemented a threat intelligence platform for rapid exchange of information about cybersecurity incidents with the financial sector; this platform was integrated with that of the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market and the platform of the National Coordination Center for Information Security.

In addition, in 2021, 45 organizations were connected to the MISP (Malware information sharing platform) and more than 330 vulnerabilities were published. At present, the MISP receives data from independent sources, including the National Bank’s systems of vulnerability scanning and open sources in the Internet (indicators of compromise).

Works on the implementation of the target architecture of a unified technological platform in accordance with the approved Concept are underway.

In 2021, with an aim to prevent cybersecurity incidents, Memorandums of cooperation were concluded with six CyberSec companies of the Republic of Kazakhstan in order to exchange information about cyber threats and vulnerabilities in information security of the financial market entities. An effort was made to accede the FIRST international organization (the global Forum of Incident Response and Security Teams).



To implement the Strategy for Cybersecurity of the Financial Sectors of the Republic of Kazakhstan for 2020–2022¹¹, regulations governing operation of the payment services market have been drafted in respect of ensuring cybersecurity and unified requirements to ensuring cybersecurity in the National Bank's system were elaborated; the National Bank's personnel have undergone professional training courses on information security management. Key aspects of cybersecurity and plans for its development at the National Bank based on the joint meeting between the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market, the "Unified Accumulative Pension Fund" JSC and the National Bank's subsidiaries were worked out.

In order to increase the level of competence in cybersecurity issues among employees, during 2021, 844 National Bank employees were trained on the basis of a specialized platform for mastering cybersecurity skills. As part of the training, employees are aware of modern information threats and have acquired skills through practical examples. The works in this field are ongoing.

On November 12, 2021, within the framework of the IX Congress of Financial Institutions of Kazakhstan, a panel session "Cybersecurity and Fraud in the Financial Market" was held aiming at the development of interaction in the field of cybersecurity in the financial sector and fraud management. In addition, measures were taken to ensure protection of the Congress of Financial Institutions of Kazakhstan's website and arrange the monitoring of detection and response to cyber attacks in the real time mode.

In 2021, in cooperation with the "Center for the Development of Payment and Financial Technologies" JSC, the necessary level of cybersecurity was determined for such projects as the program for building a digital biometric identification platform, a prototype software for the digital currency platform of the central bank of Kazakhstan, a program for the development of a digital payment system and the Concept for the development of financial technologies and innovations.

2.7 INTERNATIONAL COOPERATION

In 2021, through a regular dialogue, the National Bank continued to build long-term cooperation with key foreign counterparts: central banks, international financial organizations and bodies of regional integration associations.

In 2021, the National Bank's senior management took part in the Spring and Annual Meetings of the Board of Governors of the IMF and the World Bank Group in a virtual format. In their course, meetings with the members of the IMF Swiss Subgroup and the National Bank's counterparts were held. In addition, the representatives from the National Bank participated in the session of the IMF's International Monetary and Financial Committee and in the Panel Discussion of Central Bank Governors and Ministers of Finance of the Caucasus and the Central Asia, and the Panel Discussion of Central Bank Governors of the Middle East and Central Asia. In the course of these meetings, such topics as the recovery of economic activity, exit from the economic support programs, implementation of the central bank digital currencies, and the impact of climate change on the global economy were discussed.

In accordance with Article IV of the IMF Articles of Agreement, the National Bank also held meetings with the IMF mission in off-line and in virtual formats. The purpose of the IMF mission was to review the current financial and economic development of Kazakhstan as well as to discuss the priority areas in the development of the country. Following the visit of the IMF mission, the Mission's Final Statement was published, whereby the decisive and timely measures taken by the National Bank, the Government and the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market in response to the COVID-19 pandemic played a key role in absorbing external shocks and in restoring the economic activity.

As part of the IMF assistance in opening the Regional Capacity Development Center for the Caucasus, Central Asia and Mongolia in the city of Almaty (the "Technical Assistance Center"), which began to function in a virtual format in 2021, the National Bank made an effort to coordinate the approval of the draft Memorandum of Understanding between the Republic of Kazakhstan and the IMF on the Technical Assistance Center with

¹¹ Joint Board Resolution of the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market dated July 20, 2020 No. 69 and of the National Bank of the Republic of Kazakhstan dated July 20, 2020 No. 89 :On Approval of the Strategy of Cybersecurity of the Financial Sector of the Republic of Kazakhstan for 2020–2022".

stakeholder government agencies of the Republic of Kazakhstan. The signing of the Memorandum is scheduled for 2022 following the completion of national coordination and other procedures.

Representatives of the National Bank took part in webinars, regional and research/analytical seminars of the Technical Assistance Center on cybersecurity, government debt management and forecasting in the context of the COVID-19 pandemic, exit from economic support programs, credit risks, dollarization and climate change.

In 2021, the National Bank's senior management also conducted meetings with representatives of the World Bank, European Bank for Reconstruction and Development and other international financial organizations with an aim to discuss the macroeconomic situation, monetary policy and the prospects of expanding bilateral cooperation.

In 2021, the National Bank continued to bring in technical assistance from international financial organizations and foreign central banks. Thus, within framework of the "Comprehensive Plan for the Economic Growth Recovery until the End of 2020", the National Bank, in collaboration with the Agency of the Republic of Kazakhstan for Regulation and Development of the Financial Market, proceeded with the establishment of the non-performing assets market, with a technical assistance from the European Bank for Reconstruction and Development being brought in to implement this project. The technical assistance from the European Central Bank and the Bank of Korea Knowledge Partnership Program 2021 was brought in to address the problems of bank supervision and stress testing. In addition, the IMF had provided technical assistance on cybersecurity, macroeconomic forecasting, and central bank digital currencies. In conjunction with the Central Bank of Hungary, events were held to exchange experience and best practices in the field of instant payments, digitalization of payment systems and central bank digital currencies.

As part of collaboration with the Government and international rating agencies on the sovereign rating of Kazakhstan, consultations were held to assess the effectiveness of the implemented macroeconomic policy, in particular, the monetary policy of the National Bank Kazakhstan, based on which Moody's upgraded the long-term credit rating of Kazakhstan from "Baa3" with a "positive" outlook to "Baa2" with a "stable" outlook. Fitch Ratings and S&P Global Ratings have confirmed the sovereign rating of Kazakhstan at "BBB" with a

"Stable" outlook and at "BBB-" with a "Stable" outlook, respectively.

In 2021, in order to develop bilateral cooperation, the National Bank held meetings with the senior management of central banks of Vietnam, Korea, Kuwait, Italy, Switzerland and Sweden. In addition, to expand and strengthen cooperation with international financial organizations and foreign counterparts, the National Bank organized a working visit of the National Bank Governor to European countries (the United Kingdom, Switzerland); as part of these visits, meetings were held with the General Manager of the Bank for International Settlements and CEOs of global asset management companies and companies engaged in the development of financial technologies.

In addition, as part of development of bilateral cooperation, the National Bank's senior management took part in the 17th meeting of the Sub-committee on Interbank and Investment Cooperation between the Republic of Kazakhstan and the Russian Federation, in the 11th meeting of the Sub-Committee on Financial Cooperation of the Kazakh-Chinese Cooperation Committee as well as in the 10th meeting of the Kazakh-Chinese Cooperation Committee. In order to implement the decisions of the National Bank Sub-committee, meetings were organized to discuss the establishment of a trading and clearing link between the Kazakhstan Stock Exchange and the Moscow Exchange.

In the context of promoting national interests in the regional integration associations, the National Bank's senior management took part in regular sessions of the Board of the Eurasian Economic Commission, the Council of the Eurasian Interstate Bank, the meeting of ministers of finance and central bank governors of countries-members of the Shanghai Cooperation Organization.

On April 15 and September 23, 2021, the National Bank Governor took part in the meetings of the Advisory Board on the Monetary Policy of Central Banks of the EAEU Member States to discuss the current economic situation and the monetary policy implementation in the EAEU Member States.

With an aim to strengthen multilateral cooperation within regional integration associations, the National Bank's representatives took part in the sessions of the Consultative Committee on Macroeconomic Policy, Consultative Committee on Statistics, Consultative Committee on Financial Markets, in meetings of the sub-committee and working groups on the Eurasian



Economic Commission's platform, Eurasian Council of Heads of Central (National) Banks, the Regional Consultative Group of the Board of Financial Stability in the CIS space.

In 2021, an effort was made to ensure regulatory environment for the attachment of the National Bank employees, on an equal basis with civil servants of the Republic of Kazakhstan, to foreign institutions of the Republic of Kazakhstan. Corresponding amendments were made to the Law of the Republic of Kazakhstan dated March 30, 1995 "On the National Bank of the Republic of Kazakhstan" as well as to the Law of

the Republic of Kazakhstan dated March 7, 2002 "On the Diplomatic Service of the Republic of Kazakhstan".

In 2021, as part of the signing off the draft "Roadmap for a gradual increase in the share of national currencies in mutual settlements within Shanghai Cooperation Organization", five expert meetings were held with participation of representatives of national (central) banks, ministries of finance, ministers of economic development and foreign affairs of the member states as well as the Interbank Consortium of the Shanghai Cooperation Organization.

SECTION 3.

ORGANIZATIONAL DEVELOPMENT OF THE NATIONAL BANK



3.1 ORGANIZATIONAL STRUCTURE AND STAFFING

The National Bank is making an ongoing effort to improve its performance based on the strategic priorities of the National Bank and international practice, including by establishing an optimal and dynamic structure of the National Bank and creating conditions for the human capital development.

At the end of 2021, the National Bank's structure included 23 business units in the head office (21 departments and 2 stand-alone divisions), Permanent Representative Office of the National Bank in the city of Almaty, 18 branches and 3 republican state-owned enterprises under its jurisdiction (Table 3.1.1).

Table 3.1.1 Staff size of the National Bank

1	Staff size at end-period			
	Staffing table, number of individuals		Staff listing, number of individuals	
	2020	2021	2020	2021
2	3	4	5	
Head office	838	838	727	749
Representative office	48	48	48	47
Branches	1 192	1 192	1 228	1 206
Sub-total:	2 078	2 078	2 003	2 002
National Bank's organizations (RSOEs)	905	905	894	879
Grand total at the National Bank:	2 983	2 983	2 897	2 881

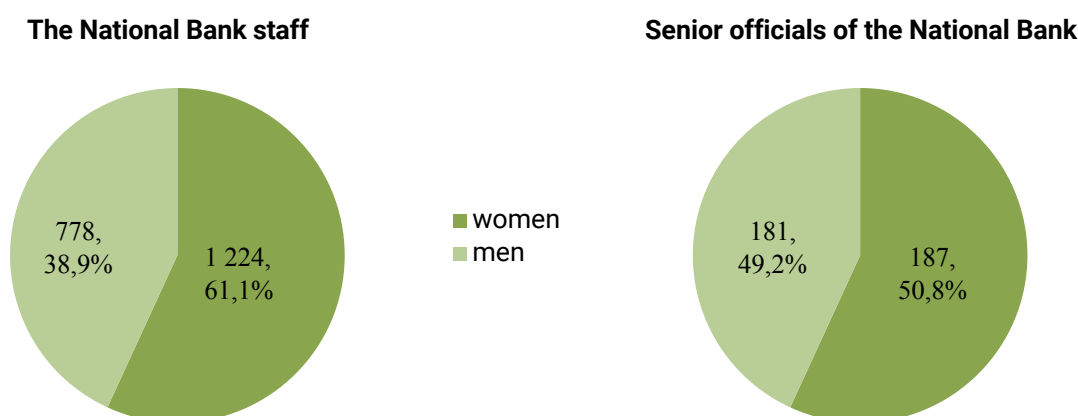
The number of women among the National Bank staff was 1 224 individuals (61.1%), including 471 individuals (62.9%) in the head office, 724 individuals (60.0%) in the branches, and 29 individuals (61.7%) in the Representative office.

The gender distribution among the managerial staff was as follows: the number of female executives was 187 individuals (50.8%), including 79 individuals (44.9%) in the head office, 100 individuals (56.2%) in the branches, and 8 individuals (57.1%) in the Representative office (Figure 3.1.1).

The average age of the National Bank's staff in the head office was 37 years old, in branches and the Representative Office – 43 years old, and in organizations – 42 years old.

During 2020, the rate of the staff turnover at the National Bank was as follows: in the head office – 10.9%, in the Representative Office – 12.4%, in branches – 6.9%, and in organizations – 8.4%.

Figure 3.1.1 Gender composition of the National Bank staff



With an aim to build the employee pool of the highly qualified staff meeting the National Bank's requirements, in 2021 the selection of personnel for employee

positions of the National Bank was conducted. Based on the selection, 23 graduates from the master's school with the autonomous organization of education (AOE)

"Nazarbayev University" were employed at the head office of the National Bank and its organizations, including 17 candidates who have undergone training under the National Bank's grant and 27 with foreign education. In addition, work was undertaken with succession candidates from the Presidential youth employee pool.

A comprehensive efforts were also made to train the professional cadres for the National Bank and other government agencies and financial organizations of the Republic of Kazakhstan, including coordination of educational projects.

Within the framework of cooperation on educational projects with the AOE "Nazarbayev University":

- ▶ an agreement was concluded on training under the MSc in Finance program and 7 training grants from the National Bank were provided;
- ▶ three National Bank employees were assigned to training under the Executive MBA program;
- ▶ a training module was arranged for the students in the MSc in Finance program for 2020–2021 with lectures from the National Bank staff.

As part of cooperation on education projects with the non-profit joint-stock company "Narkhoz University", 22 training grants from the National Bank were provided for the following study programs: "Financial Analyst", "Financial Risk Management", "Macroanalytics and Forecasting", "Actuary", and, based on their performance, 24 graduate students were started off on the second-year programme of 2020–2023.

In addition, education projects of Kazakhstan's branch of Lomonosov Moscow State University and other universities were in progress.

In general, a systemic effort has been made on career enhancement, training and development of the National Bank staff. In 2021, 1 909 employees of the head office and branches have undergone training including distant learning, of which: 466 – in the National Bank's premises; 839 – in training centers in Kazakhstan and 604 – abroad.

In order to build an integral system for managing the National Bank's efficient performance, in 2021 the following were approved:

- ▶ the system of key performance indicators of the National Bank aimed at effective planning and organization of the National Bank's operations, at attaining its strategic goals and staff incentive schemes depending on the achieved results of its operations;
- ▶ models of strategic, management and functional competencies and the methods of their assessment aimed at improving the processes of staff recruitment and determining to what extent the candidates' competencies are up to their jobs, as well as identifying potential of the National Bank staff, and determining their needs in training, development and career progression.

With a view to make the performance of the National Bank's head office more efficient and improving conditions of employment after the National Bank's relocation to the city of Nur-Sultan, the construction of new office building in Nur-Sultan commenced, being the first author's design project of Zaha Hadid Architects, British architecture and design firm, in Kazakhstan's capital.

The building will be equipped with the most advanced engineering systems and communications. Under the design documentation, the duration of construction is 18 months.

3.2 RISK MANAGEMENT

3.2.1 FINANCIAL RISKS MANAGEMENT

As part of the asset management process, the National Bank conducts ongoing financial risks analysis and assessment by ensuring that the system to identify and assess market and credit risks, to control and monitor the level of risk is in place. The level of credit and market risk is controlled by setting requirements to financial instruments credit quality, their issuers and counterparties of the National Bank. In addition, the system of credit risk limits has been put up,

namely, limits have been set for transactions with counterparties as well as limits for the acquisition of financial instruments from one issuer, and thresholds on concentration and custody.

In 2021, due to the tightening monetary policy of the US Federal Reserve System, the measures taken by the Government of China to regulate the IT and real estate sectors, the energy crisis, the deficit in the commodity market and rising inflation, the National Bank expanded the types of operations, in particular, to carry out



the gold purchase and/or sales using derivatives to make the asset management more efficient; in addition, the portfolio of strategic investments was created within the alternative instruments portfolio of the National Bank's gold and foreign exchange assets.

To ensure a more expedite decision-making and variability of management styles, an approach was developed to select potential managers of alternative instruments portfolio of the National Bank's gold and foreign exchange assets, to include them in the list of strategic partners and conduct a procedure for preparing and concluding agreements with such potential managers.

In 2021, within the framework of pension assets management, the evaluation system used to put restrictions on investment in potential countries financial instruments has been improved. This system includes assessment of the countries political and economic situation, taking in account such indicators as the control of corruption, the effectiveness of public administration, political stability, and the rule of law, the regulatory framework quality, voting rights and accountability, and the issuers credit quality.

In addition, in 2021 the National Bank risk management system was introduced to the risk appetite indicator, an important component of the central bank activities that allows to systemize the risk management process. As part of this work, the risk appetite concept, the pros and cons of its application was studied to prepare a preliminary assessment of the implementation possibility in the National Bank with regard to its specific features. In order to ensure a sufficient level of liquidity and maintain profitability, a revision of the strategic allocation of National Bank's gold and foreign exchange assets is expected in 2022. Based on the results of strategic allocation revision, the implementation of the risk appetite will be continued.

In accordance with the international financial reporting standard 9, Financial Instruments, expected credit losses on the National Bank's financial assets are calculated and provisions for losses are created on a quarterly basis. The calculation of expected credit losses is based on credit ratings of financial assets as assigned by the international rating agency Standard & Poor's and on the default probability maps prepared by this agency. As at the end of 2021, the expected credit losses amounted to 42.2 billion tenge.

The National Bank elaborated the methodology for calculation of amounts of expected credit losses on the National Fund's financial assets in accordance with

the international financial reporting standard 9, Financial Instruments. The methodology is based on the Standard & Poor's data and recommendations of the external auditor, Deloitte LLP. As at the end of 2021, the amount of expected credit losses made up 177 million tenge.

The National Bank, on a quarterly basis, established internal credit ratings and indicative limits for banks that are based on the methodology for assessment of banks classic financial performance indicators and the international rating agencies credit rating alongside with bank loan portfolio assessment.

3.2.2 OPERATIONAL RISKS AND BUSINESS CONTINUITY

The operational risk management at the National Bank is based on an adapted model of three lines of defense and the principles of the Committee of Sponsoring Organizations of the Treadway Commission, which involves a continuous review of approaches, their improvement and monitoring. An appropriate mechanism has been established for each of the lines of defense, which predetermines the effective management of operational risks. The enhanced role of the second line of defense is an essential element of the model adjustment to the National Bank's activities. Hence, the second line of defence analyzes the existing processes of the National Bank and implements the elaborated recommendations regarding risk minimization. As part of the risk management, the risks inherent to the National Bank's processes were identified and analyzed, whereby relevant measures were taken that allowed minimizing risks in certain processes.

Approaches to ensuring the business continuity have been revised with an aim to comply with international standards. Thus, in 2021 the Business Continuity Policy was significantly developed, procedures of the mechanism of impact analysis on business processes were fundamentally strengthened. Along with that, work was carried out to increase the fault tolerance of critical business processes including communication and electricity supply channels.

3.2.3 COMPLIANCE CONTROL

In order to fulfill the requirements of anti-corruption legislation, in all republican state-owned enterprises and joint-stock companies with the National Bank participation the compliance function was completed. In organizations of National Bank changes to their manning tables were introduced, employees to perform the compliance functions were appointed; regulations defining the status (with specification of direct line of

accountability to the CEO of a republican state-owned enterprise and to the Board of Directors of a joint-stock company), and authorities and compliance functions were adopted.

In 2021, a compliance monitoring of procurements of goods, works and services in the National Bank's system was implemented and a relevant procedure was approved, which also applies to organizations within a uniform centralized structure of the National Bank. Procurements monitoring is carried out in order to oversight and review of procurement processes performed by authorized business units of the National Bank on procurement portal, in line with the risk profile. During 2021, more than 70 procurements totaling over 5 billion tenge were inspected. In the course of monitoring, certain shortcomings and inconsistencies with the set requirements were detected and were promptly eliminated by procurement authorities.

With an aim to detect corruption violations and to investigate the reasons and conditions causing their commitment the internal analysis of the National Bank's business units activities was performed in.

The internal analysis of corruption risks was carried out in the following areas: personnel management, procurements, implementation of control and supervisory functions, provision of public services. No instances of corruption risks in the activities of the National Bank's business units have been detected based on the internal analysis. An anonymous survey regarding working conditions and the team's moral and psychological condition as well as on corruption combating issues also had taken place while conducting the internal analysis of corruption risks.

Preventive work on creating awareness among the National Bank staff about the necessity of compliance with the requirements of anti-corruption legislation and anti-corruption standards of the National Bank was carried out on an ongoing basis. There was a regular mailshot with a reminder of conditions for combating corruption and adhering to ethical standards.

During 2021, no instances of violations of the anti-corruption legislation by the National Bank staff had been detected.

3.3 RESEARCH WORK AT THE NATIONAL BANK

Research plays a significant role in the activities of a central bank and is an essential part of the analytical tools that determine the decision-making process.

In 2021, the National Bank published the Research Program for 2021–2022 that defines the National Bank's medium-term directions for research in macroeconomic policy, including monetary, fiscal, and macroprudential policies. The purpose of the Program is to provide all stakeholders with the most demanded research tasks, which, when solved, will improve justification and credibility of the National Bank's decisions.

The National Bank's staff prepared working papers in the above research areas that were published on the official web site of the National Bank in the "Working paper series of the National Bank of Kazakhstan" section, as well as a number of papers in the National Bank's "Economic Review" periodical.

An important area of research for the National Bank in 2021 was the interaction between the fiscal and monetary policies. In the study entitled "The Role of the Fiscal Policy in the Price (In)Stability in Kazakhstan:

Empirical Assessment and Macroeconomic Equilibrating Mechanism", a retrospective analysis of the nature of fiscal policy, its interaction with monetary policy as well as an empirical assessment of the impact of fiscal parameters on inflationary processes was performed.

The results of the study "Assessing the influence of finance on economic growth through the prism of investments, credits and money supply" showed that the main reason for decline in the long-term economic growth is not a reduction in the volume of financing of the economy but mainly in a lower efficiency of production factors.

In a study on the topic of "The analysis of effectiveness of the interest rate channel in Kazakhstan", the relationship between the National Bank's base rate, the consumer lending rate and the inflation rate in Kazakhstan in the period from 2016 to 2020 was explored using the vector autoregression (VAR) model. The results showed that the interest rate in Kazakhstan still does not have a direct impact on the inflation rate, while at the same time it affects the consumer loan rate, which, in turn, affects the inflation rate.



In addition, in 2021 the work was underway to improve the model tools for scenario-based forecasts. The study entitled “Building a Large Bayesian Vector Autoregression Model for Kazakhstan” presents the results of evaluating the effectiveness of Bayesian Vector Autoregression models (BVAR) in forecasting the economic activity, inflation, the exchange rate and the TONIA rate in Kazakhstan for various horizons up to 1 year in comparison with simpler alternative models (the naïve model and VAR model).

The study of micro data on the level of loans, which are contained in the Credit Register, plays an important role in assessing the state of the banking sector and financial stability. The study “Assessing the quality of loan portfolio based on the loan-level data” presents a methodology for assessing the loan portfolio, which allows to identify the refinanced “evergreen” loans and hidden defaults based on proxy indicators using the Credit Register. This methodology is the first attempt to apply loan-based analysis in Kazakhstan, which can be developed by using the new extended loan and borrower data incorporated in the Credit Register from July 2019.

In addition, based on the data from the Credit Register, an analysis of consumer loans was carried out in 2021, and its results are presented in the study “Consumer Credit Risk Analysis via Machine Learning Algorithms”. As part of the study, the creditworthiness of individuals was assessed by using machine-learning algorithms. This study enables to review the quality of consumer loans provided by banks and predict potential systemic risks.

In 2021, a number of studies carried out by the National Bank were devoted to the government securities market of Kazakhstan. In the study “Liquidity of the Government Securities Market: Problems and Prospects for Solutions”, an analysis of the factors underlying the low liquidity and depth of the government securities market in Kazakhstan was carried out, as well as the potential for market development, options for improving its structure and functioning were discussed. The study “The Role of Market Makers and Primary Dealers in Liquidity of the Government Securities Market” is devoted to the issues of liquidity of the government debt market. The article describes the role of using market makers and the institution of primary dealers in increasing liquidity of the government bond market, provides the basic principles and models for building a system of primary dealers in the international practice.

The National Bank continued the series of studies devoted to the analysis of foreign economic activity. In particular, in the study entitled “The Analysis of Flows across the Financial Account by Sectors of the Economy”, an

analysis of international capital flows and capital flows in Kazakhstan was presented, the world experience of the financial account forecasting was discussed, and the system of the financial account forecasting at the National Bank was also disclosed. In the article, “The Impact of Consumer Lending on the Dynamics of Imports of Goods to Kazakhstan”, the influence of consumer lending on the current account dynamics through the imports of goods was considered. The results of the study showed that the growth of consumer lending does not always lead to an increase in risks for the economy. However, in the context of lagging domestic production, the growth of consumer lending in Kazakhstan is a source of pro-inflationary pressure.

In 2021, the study entitled “Corporate Bankruptcy in Kazakhstan: Problems and Solutions” was also conducted, which showed that corporate bankruptcy remains inefficient, is characterized by extremely low recovery for creditors and low interest on the part of secured creditors.

The results of systemic risk analysis and research in the field of financial stability, including the analysis of macroeconomic conditions, of the government securities market, the real estate market as well as the assessment of credit and other risks to financial stability, taking into account the impact of the COVID-19 pandemic, were published in 2021 in the “Financial Stability Report of Kazakhstan for 2020”.

In order to provide analytical information about the situation in the money market, foreign exchange market, and deposit, credit and securities markets to the financial market participants and the population, in 2021 the National Bank continued to publish the quarterly report “Financial Market Review”. In addition, 12 press releases were published in 2021 as part of providing data about the situation in the financial market.

In monitoring the business climate in the real sector of the economy, in 2021, the National Bank on a regular basis conducted an enterprise survey to identify key trends in the business environment. In order to assess the impact of the COVID-19 pandemic and restrictive measures on operations of enterprises and estimate the duration of recovery period, a one-time survey was conducted and its results are reflected in the “Market Review” and “Industry-specific Market Review” reports, as well as in the “Monetary Policy Report” published by the National Bank on a quarterly basis on its Internet resource. The Monthly PMI Review has been supplemented with a new Business Cycle Clock tool that allows determining the phase of the cycle in which the economy is at a particular moment in time.

In order to improve communication with the market, the National Bank began to conduct a regular review of inflation trends in the regions of the Republic of Kazakhstan that presents a comparative analysis of the dynamics of annual inflation as well as a comparison of monthly inflation with the historical average of the region. The results of this work have been published since April 2021 in the "Inflation Trends in Regions" report on the National Bank's Internet resource.

In order to ensure transparency of decisions about the base rate and make communication more efficient, eight press releases and analytical and research materials were published. The results of the analysis of key macroeconomic factors influencing inflationary processes as well as the forecasts of macroeconomic parameters used in making decisions on the level of the base rate were published in the quarterly "Monetary Policy Report". In addition, as part of expanding the scope of topics and in-depth consideration of the analyzed issues, this publication incorporated an analysis of a wide range of macroeconomic aspects including the overview of the mortgage and real estate market, an analysis of the real sector and of the balance of payments as part of assessment of current macroeconomic conditions, and others.

As regards the external sector, in 2021 four quarterly publications of the National Bank, "Kazakhstan: Balance of Payments and External Debt for 2021" were prepared and posted.

The National Bank went on with improving the medium-term forecasting techniques including within the framework of technical assistance from international organizations. Specifically, in conjunction with experts from the IMF mission on fine-tuning the Forecasting and Policy Analysis System at the National Bank, a selective adjustment of the model parameter values was performed enabling to make better forecasts.

As part of improving the forecast of the current account of the balance of payments, the techniques for forecasting the imports of goods and the balance of services were revised, and the techniques for forecasting the export of goods and the income balance were modified. Thus, the technique for forecasting exports of goods was improved in terms of giving scenario value and seasonality to individual components of the non-oil portion of exports. The system of multifactorial linear regression models for groups of imports was designed. Approaches to the forecasting of adjustments according to the methodology of the balance of payments – "shuttle" trade and freight – have been developed. Linear regression and autoregression models have been fine-tuned for forecasting the balance of services items.

New approaches have been introduced to forecasting interest on direct, portfolio and other investments, and wages payable.

In order to improve the forecast of the financial account of the balance of payments, a new forecasting system was designed with a breakdown by the following sectors of the economy: the general government sector, the private sector – oil sector (3 large oil and gas projects) and the private sector – non-oil sector.

In addition, the Digitalization Office of the National Bank approved for use the developed analytical toolkit on the database of foreign trade of Kazakhstan, which contains the most comprehensive database of monthly data on foreign trade of Kazakhstan from 1995 to 2021 and also enables to structure the data with a great level of detail on goods.

To ensure a further development of the analysis and forecasting system, the National Bank, in conjunction with the "Payment and Financial Technologies Development" JSC, made an effort to improve the information system for consumer price monitoring and analysis entitled NBK Price Tracker, developed a web application for augmented data visualization; expanded a regional and product coverage, took actions to design the machine learning model for classification of the pool of goods and also formulated indices on foodstuffs and non-food products.

The research potential of the National Bank employees was strengthened by participation in online conferences and webinars organized by international financial organizations and central banks of other countries. Among other things, representatives of the National Bank participated as speakers at a meeting of the Expert Council on Financial Integration of the EAEU Member States, where the audience was provided with a presentation on the transmission of macroeconomic shocks on Kazakhstan's economy, as well as at the International Scientific and Practical Online Conference "Modern challenges and transformation of the economy" (branch of Lomonosov Moscow State University) with the topic of "Credit Risk and the Added Value of Financial Intermediation within the Framework of Macroeconomic Policy".

The National Bank conducted a webinar on the topic of the "Monetary Policy Implementation at the National Bank. Monetary Policy Instruments" that was attended by representatives from central banks of Belarus, Armenia, Tajikistan and Uzbekistan.

To facilitate a high-quality research by entities engaged in academic, scientific and research activities, a



mechanism for providing grants for research on priority areas of National Bank's activities was implemented. Objectivity and transparency of the granting process is ensured through the involvement of independent reviewers from among representatives of academic institutions and the adoption of a collegial decision by the Grants Commission, which includes the National Bank's employees and external members. In 2021, the first National Bank research grant competition was

held, based on which a decision was made to award 8 research grants.

During 2021, the results of analytical and research work were widely covered in interviews with the National Bank management in the media and were regularly posted on the official Internet resource as part of building effective communication with the public.

3.4 COMMUNICATION POLICY

During 2021 prompt and high-quality explanation of decisions, events and trends in the financial market was in focus of the National Bank's communication policy.

Detailed interviews by the Deputy Governors of the National Bank were published monthly on the monetary policy guidelines, situation in the foreign exchange market, the factors affecting the tenge exchange rate, the results of investment management of the National Fund assets, the balance of payments, and the volume of the country's international reserves.

Each decision of the National Bank on the base rate was also accompanied by a detailed commentary on the dynamics and factors of inflation, the level of inflation expectations among the Kazakhstan's population, lending, and the attractiveness of tenge assets.

The National Bank actively supported public discussion on innovations in fintech, in particular about the launch of the Central Bank Digital Currency, or Digital Tenge, in Kazakhstan and also highlighted the progress regarding the development of the National Payment system.

In addition, on-the-spot comments were prepared on the most prominent issues in the society, including short-term fluctuations in the tenge exchange rate or the National Bank's phased withdrawal from economic support programs, in particular, upon completion of financing of the soft-window facility for buyers of domestically-manufactured cars.

In order to strengthen communication policy and build accurate understanding of the National Bank's policy, the effort was also focused on publication of comments by leading experts on the monetary policy aspects, particularly the nature of inflation in Kazakhstan, tariffs, inflationary processes in Kazakhstan and other countries being the trading partners, the imports and exports

dynamics, as well as international cases in the field of monetary regulation.

In 2021, the National Bank continued its fruitful cooperation with the mass media; about 200 inquiries from Kazakhstani and foreign mass media were received.

The National Bank's official resources on the Internet continue to be in demand, the National Bank's website traffic showed an upward trend. The sections most frequently viewed by users include "Statistics", "Monetary Policy", "Press Center and Research". During the year the website of the National Bank was in the top-50 of Kazakhstan's rating of Internet statistics.

The total reach of the official pages of the National Bank in social media amounted to 85 thousand users during the year, while the monthly audience increased by more than 2 times compared to the beginning of the year. The share of video content in social media remained high, with the videos being produced to deliver the expertise of speakers of the National Bank.

One of the important events of 2021 was the traditional Congress of Financiers of Kazakhstan. The event was held in the format of an online conference broadcasting the speeches by the senior executives of the National Bank, representatives of the government authorities, and the prominent figures on Kazakhstan's financial market, as well as live discussions being available for viewing to everyone on the Atameken Business TV Channel and on the official Youtube channel of the National Bank.

In general, the communication activity of the National Bank was focused on maintaining the status of information disclosure and transparency of the decisions being taken.

3.5 PUBLIC SERVICES

In 2021, the National Bank provided 223 public services (in an electronic form).

Based on monitoring activities, no violations were identified; public services were provided on time in accordance with the requirements of regulations of the Republic of Kazakhstan governing the provision of public services.

The quality of public services is monitored on a monthly basis. In 2021, timely and high-quality submission of the National Bank's report on internal control over

the level of public services to the competent authority was ensured.

In implementing the commission's recommendation based on the results of on-the-spot assessment of activities of government authorities in the block of "Interaction of a government authority with individuals and legal entities" for 2020, in November 2021, a training session was held for employees of the "Government for Citizens" Public Corporation" Unified Contact Center.



APPENDIX



APPENDIX 1 TO SECTION 1.2.4

Table 1.2.4.1 Balance of Payments of the Republic of Kazakhstan: Analytical Presentation (million US dollars)

	2020	2021	2021			
			I	II	III	IV
Current account	-6571.1	-5 736.5	-1 570.2	-1 184.9	-1 396.7	-1 584.6
Trade balance	10286.3	20 673.8	3 657.5	5 481.8	5 552.6	5 981.9
Exports	47305.5	60 336.5	11 469.0	15 552.4	16 199.3	17 115.8
Imports	37019.2	39 662.7	7 811.5	10 070.6	10 646.7	11 133.9
Services	-3112.3	-1 850.1	-321.3	-383.2	-534.2	-611.3
Exports	5049.8	5 814.0	1 220.2	1 464.9	1 549.7	1 579.2
Imports	8162.0	7 664.1	1 541.5	1 848.1	2 084.0	2 190.5
Primary income	-15090.9	-24 221.9	-4 878.0	-6 153.5	-6 293.6	-6 896.8
Compensation of employees, net	-899.9	-1 130.6	-207.2	-258.2	-296.7	-368.4
Investment income, net	-14317.8	-23 226.4	-4 704.8	-5 928.7	-6 030.7	-6 562.1
Income payable	1923.3	2 026.9	419.8	639.4	503.5	464.2
Income on direct investments	374.2	554.6	59.0	236.5	139.4	119.8
Income on portfolio investments	1180.6	1 188.2	285.0	313.7	302.3	287.2
Income on other investments	368.5	284.0	75.8	89.3	61.8	57.2
<i>of which Interest on reserves and assets of the National Fund</i>	969.7	933.5	224.4	254.5	234.5	220.1
Income payable	16241.1	25 253.3	5 124.6	6 568.2	6 534.2	7 026.3
Income on direct investments	14072.6	22 815.1	4 596.2	5 944.1	5 913.0	6 361.7
Income on portfolio investments	898.1	1 100.9	221.7	266.9	316.7	295.6
Income on other investments	1270.4	1 337.3	306.7	357.2	304.4	368.9
Other primary income (net)	126.8	135.0	34.1	33.4	33.8	33.8
Secondary income	236.2	-338.3	-28.4	-130.0	-121.4	-58.4
Capital account balance	231.7	231.8	119.6	16.4	30.6	65.1
Financial account (excluding reserve assets)	-14 837.7	-3 016.6	-300.6	-2 521.4	-3 703.5	3 508.9
Direct investments	-5 831.0	-1 703.3	181.4	-1 482.1	-1 245.4	842.7
Net acquisition of financial assets	1 363.3	2 677.0	761.3	-134.9	670.9	1 379.8
Net incurred liabilities	7 194.3	4 380.3	579.8	1 347.1	1 916.2	537.1
Portfolio investments	-8 129.9	-3 316.1	-2 456.0	-3 791.5	-782.3	3 713.7
Net acquisition of financial assets	-6 724.8	-894.1	-1 876.4	-2 304.2	-521.3	3 807.9
Central bank and general government	-7 566.2	-5 826.6	-1 654.8	-2 782.0	-2 235.6	845.9
Banks	-746.6	1 305.3	136.1	591.3	345.8	232.2
Other sectors	1 588.0	3 627.1	-357.7	-113.5	1 368.5	2 729.8
Net incurrence of liabilities	1 405.1	2 422.0	579.6	1 487.3	260.9	94.1
RKCentral bank and general government	854.9	1 735.4	850.1	1 008.9	186.4	-310.0
Banks	-309.4	311.8	-244.5	517.2	21.0	18.1
Other sectors	859.6	374.8	-26.0	-38.8	53.5	386.0
Financial derivatives (net)	71.2	62.1	-21.9	15.9	68.9	-0.9
Other investments	-948.0	1 940.7	1 995.8	2 736.3	-1 744.8	-1 046.6
Other equity net	32.5	-7.6	-4.8	-3.9	2.5	-1.4

	2020	2021	2021			
			I	II	III	IV
Medium- and long-term debt instruments	-2 039.4	-3 201.6	-1 299.8	-222.7	-2 364.8	685.6
Net acquisition of financial assets	-567.7	-209.1	-708.9	-82.7	114.4	468.1
Central bank and general government	-6.5	-6.0	-1.6	-1.7	-1.6	-1.1
Banks	142.4	124.9	52.4	16.7	-14.5	70.3
Other sectors	-703.6	-328.0	-759.7	-97.6	130.4	398.9
Net incurrence of liabilities	1 471.7	2 992.6	590.9	140.0	2 479.2	-217.5
Central bank and general government	356.7	2 198.4	787.5	-72.1	1 495.7	-12.7
Banks	137.7	-166.9	23.4	-66.6	-21.7	-102.0
Other sectors	977.4	961.1	-220.1	278.8	1 005.2	-102.8
Short-term debt instruments	1 059.0	5 150.0	3 300.4	2 962.9	617.5	-1 730.8
Net acquisition of financial assets	2 229.5	8 414.9	4 247.0	4 513.2	222.5	-567.8
Net incurrence of liabilities	1 170.6	3 264.9	946.6	1 550.4	-395.0	1 163.0
Net errors and omissions	-9 392.5	123.9	1 301.5	-877.1	-1 879.9	1 579.4
Overall balance	889.7	2 364.2	-151.6	-475.8	-457.5	3 449.0
Financing	-889.7	-2 364.2	151.6	475.8	457.5	-3 449.0
Reserve assets	-889.7	-2 364.2	151.6	475.8	457.5	-3 449.0
IMF credits	0.0	0.0				
Exceptional financing	0.0	0.0				

APPENDIX 2 TO SECTION 1.2.4

Table 1.2.4.2 External Debt: Standard Presentation (million US dollars)

	As at January 1, 2020	As at January 1, 2021	As at April 1, 2021	As at July 1, 2021	As at October 1, 2021	As at January 1, 2022
External debt	159 544.2	164 539.5	164 410.5	166 985.0	166 558.8	165 056.8
Short-term	8 801.2	9 965.9	11 372.0	12 713.2	12 110.9	12 655.4
Long-term	150 743.0	154 573.6	153 038.5	154 271.8	154 447.9	152 401.4
General government	12 417.6	13 885.4	14 471.9	15 682.6	15 937.2	15 864.0
Short-term	14.9	25.0	29.8	32.8	29.5	29.0
Currency and deposits	0.0	0.0	0.0	0.0	0.0	0.0
Debt securities ¹	0.0	0.0	0.0	0.0	0.0	0.0
Loans	0.0	0.0	0.0	0.0	0.0	0.0
Trade credits and advances	14.9	25.0	29.8	32.8	29.5	29.0
Other liabilities	0.0	0.0	0.0	0.0	0.0	0.0
Long-term	12 402.7	13 860.4	14 442.1	15 649.8	15 907.7	15 835.0
Special Drawing Rights	0.0	0.0	0.0	0.0	0.0	0.0
Currency and deposits	0.0	0.0	0.0	0.0	0.0	0.0
Debt securities ¹	6 133.4	7 202.7	7 108.7	8 361.4	8 739.0	8 748.7
Loans	6 269.3	6 657.8	7 333.4	7 288.5	7 168.6	7 086.3
Trade credits and advances	0.0	0.0	0.0	0.0	0.0	0.0
Other liabilities ²	0.0	0.0	0.0	0.0	0.0	0.0
Central bank	891.1	1 329.4	1 836.0	1 714.7	3 051.3	2 535.8
Short-term	409.7	828.0	1 342.8	1 218.0	989.9	494.6
Currency and deposits	3.9	2.6	4.9	73.0	4.3	7.9
Debt securities ¹	401.6	821.2	1 333.2	1 140.3	980.8	483.3
Loans	0.0	0.0	0.0	0.0	0.0	0.0
Trade credits and advances	4.2	4.2	4.7	4.7	4.8	3.4
Other liabilities	0.0	0.0	0.0	0.0	0.0	0.0
Long-term	481.4	501.3	493.2	496.7	2 061.5	2 041.1
Special Drawing Rights	480.4	500.4	492.2	495.7	2 060.5	2 040.2
Currency and deposits	0.0	0.0	0.0	0.0	0.0	0.0
Debt securities ¹	0.0	0.0	0.0	0.0	0.0	0.0
Loans	0.0	0.0	0.0	0.0	0.0	0.0
Trade credits and advances	0.0	0.0	0.0	0.0	0.0	0.0
Other liabilities ²	1.0	1.0	1.0	1.0	1.0	1.0
Banks	4 818.1	4 837.4	4 978.8	5 975.1	5 735.1	5 493.8
Short-term	1 097.7	1 312.4	1 562.7	2 204.7	1 975.0	1 837.7
Currency and deposits	863.6	1 149.4	1 203.4	1 731.7	1 509.5	1 612.3
Debt securities ¹	0.0	0.0	0.0	0.0	0.0	0.0
Loans	95.5	23.9	80.5	194.1	210.7	9.3
Trade credits and advances	0.0	0.0	0.0	0.0	0.0	0.0
Other liabilities	138.6	139.1	278.9	278.9	254.9	216.2
Long-term	3 720.5	3 525.0	3 416.0	3 770.4	3 760.0	3 656.1
Currency and deposits	237.4	244.0	430.6	350.9	255.3	226.2
Debt securities ¹	1 875.9	1 568.2	1 434.3	1 859.7	1 885.0	1 888.8
Loans	1 607.2	1 712.8	1 551.2	1 559.8	1 619.8	1 541.2
Trade credits and advances	0.0	0.0	0.0	0.0	0.0	0.0
Other liabilities ²	0.0	0.0	0.0	0.0	0.0	0.0



	As at January 1, 2020	As at January 1, 2021	As at April 1, 2021	As at July 1, 2021	As at October 1, 2021	As at January 1, 2022
Other sectors³	41 040.5	41 944.8	41 975.2	43 271.6	43 865.6	45 090.2
Short-term	7 278.9	7 800.5	8 436.8	9 257.6	9 116.4	10 294.1
Currency and deposits	0.0	0.0	0.0	0.0	0.0	0.0
Debt securities ¹	0.0	0.0	0.0	0.0	0.0	0.0
Loans	522.5	460.1	756.1	775.2	870.2	927.3
Trade credits and advances	6 696.4	7 277.7	7 480.6	8 177.2	8 064.6	8 216.4
Other liabilities	59.9	62.7	200.1	305.2	181.6	1 150.4
Long-term	33 761.7	34 144.3	33 538.5	34 014.0	34 749.2	34 796.0
Currency and deposits	0.0	0.0	0.0	0.0	0.0	0.0
Debt securities ¹	9 491.1	10 540.2	10 391.7	10 626.3	10 467.4	10 773.5
Loans	22 309.9	21 651.6	21 324.7	21 525.5	21 560.5	21 397.5
Trade credits and advances	1 749.2	1 689.9	1 547.8	1 521.0	1 952.6	1 894.9
Other liabilities ²	211.5	262.7	274.3	341.1	768.7	730.1
Other financial corporations	1 443.9	1 288.7	1 346.6	1 379.0	1 346.2	2 455.9
Short-term	80.2	37.1	97.2	116.6	114.6	1 095.1
Long-term	1 363.7	1 251.5	1 249.5	1 262.3	1 231.6	1 360.8
Non-financial corporations, households and nonprofit institutions serving households	39 596.7	40 656.1	40 628.6	41 892.6	42 519.5	42 634.2
Short-term	7 198.7	7 763.3	8 339.6	9 141.0	9 001.9	9 199.0
Long-term	32 398.0	32 892.8	32 289.0	32 751.6	33 517.6	33 435.3
Direct investments: Intercompany lending	100 376.8	102 542.5	101 148.6	100 340.9	97 969.6	96 073.0
Debt liabilities of direct investment enterprises to direct investors	82 230.5	82 483.3	82 106.8	81 697.8	80 810.3	79 217.0
Debt liabilities of direct investors to direct investment enterprises (reverse investment)	6 961.7	9 997.4	9 870.6	9 994.3	9 216.7	9 260.9
Debt liabilities between fellow enterprises	11 184.6	10 061.8	9 171.2	8 648.9	7 942.5	7 595.2

¹ Debt securities are recorded at market value (at its existence).

² Including insurance and pension programs, standardized guarantees as well as other long-term liabilities listed in the structure of an international investment position

³ Other sectors do not include intercompany lending, which goes as a separate item in the external debt structure.

APPENDIX 3 TO SECTION 1.2.4

Table 1.2.4.3 External Debt of the Republic of Kazakhstan: Absolute and Comparative Indicators

Item	2020	I quarter of 2021	II quarter of 2021	III quarter of 2021	IV quarter of 2021	2021
Absolute indicators (million US dollar)						
1. External debt (estimate at the end-of – period)	164 539.5	164 410.5	166 985.0	166 558.8	165 056.8	165 056.8
including intercompany lending	102 542.5	101 148.6	100 340.9	97 969.6	96 073.0	96 073.0
2. External debt, excluding intercompany lending (estimate at the end of-period)	61 997.0	63 261.9	66 644.0	68 589.3	68 983.7	68 983.7
3. Long-term external debt service (incl. intercompany lending)	33 930.2	6 799.5	8 537.8	7 732.3	8 856.4	31 926.0
4. Long-term external debt service (excl. intercompany lending)	14 519.9	2 593.9	3 315.4	1 952.3	3 866.5	11 728.1
Comparative indicators						
1. External debt to GDP ratio (including intercompany lending, %)	96.2	96.8	94.8	90.9	86.3	86.3
2. External debt to GDP ratio (excluding intercompany lending, %)	36.2	37.2	37.8	37.4	36.1	36.1
3. External debt to exports of goods and services for 12 months (% including intercompany lending)	314.3	335.1	313.9	276.5	249.5	249.5
4. External debt to exports of goods and services for 12 months (% excluding intercompany lending)	118.4	128.9	125.3	113.9	104.3	104.3
5. Payments for long-term external debt extinction and servicing to exports of goods and services for the period (% including intercompany lending)	64.8	53.6	50.2	43.6	47.4	48.3
6. Payments for long-term external debt extinction and servicing to exports of goods and services for the period (% excluding intercompany lending)	27.7	20.4	19.5	11.0	20.7	17.7
7. Interest payments to exports of goods and services for the period (%)	11.6	10.7	8.5	7.6	7.3	8.4
8. National Bank's international reserves to short-term external debt (%)	357.6	294.6	275.7	293.3	271.6	271.6
Reference:						
GDP (billion tenge), for the period ²	70 714.1	15 938.7	16 326.8	20 763.9	28 239.9	81 269.2
GDP for 12 months (billion US dollars) ³	171.1	169.9	176.2	183.3	191.2	191.2
Exports of goods and services for the period	52 355.3	12 689.2	17 017.3	17 749.0	18 695.0	66 150.6
Exports of goods and services for 12 months	52 355.3	49 060.4	53 202.6	60 234.1	66 150.6	66 150.6

¹Data from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan.

²Preliminary data from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan for 2021 published on February 15, 2022.

³GDP in the US dollars for the calendar year – data of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. GDP in the US dollars for 12 months for calculation of relative parameters for the quarter is derived as the amount of quarterly GDP numbers in the US dollars calculated at the corresponding average exchange rate for the quarter.

LIST OF USED ABBREVIATIONS

JSC	– a joint-stock company
bank	– the second-tier bank
GDP	– gross domestic product
US dollar	– dollar of the United States of America
EAEU	– the Eurasian Economic Union
Unified Accumulative Pension Fund	– the “Unified Accumulative Pension Fund” JSC
EU	– the European Union
IMF	– the International Monetary Fund
mln	– million
bln	– billion
National Bank	– the National Bank of the Republic of Kazakhstan
National Fund	– the National Fund of the Republic of Kazakhstan
OPEC+	– A group of countries that do not have membership in OPEC but cooperate with the Organization and among each other in some matters of oil production and exports
CIS	– the Commonwealth of Independent States
SDR	– Special Drawing Rights
trln	– trillion
thous.	– thousand
FAO	– UN Food and Agriculture Organization
FATF	– Financial Action Task Force
API	– Application Programming Interface
QR code	– Quick Response is a 2D bar code that provides information for its quick reading with a help of camera

**National Bank of the Republic
of Kazakhstan**

**CONSOLIDATED FINANCIAL
STATEMENTS**

**for the year ended
31 December 2021**



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STATEMENT OF MANAGEMENT'S RESPONSIBILITIES FOR THE PREPARATION AND APPROVAL OF THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2021

Management is responsible for the preparation of the consolidated financial statements that present fairly the financial position of the National Bank of the Republic of Kazakhstan (the "NBK") and its subsidiaries (the NBK and its subsidiaries together – the "National Bank") as at 31 December 2021, and the results of its operations, cash flows and changes in equity for the year then ended, in accordance with the Basis of Preparation described in the Note 2 to the consolidated financial statements (the "Basis of Preparation").

In preparing the consolidated financial statements, management is responsible for:

- ▶ properly selecting and applying accounting policies;
- ▶ presenting information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- ▶ following requirements of the Basis of Preparation; and
- ▶ preparing the consolidated financial statements on a going concern basis.

Management is also responsible for:

- ▶ designing, implementing and maintaining an effective and sound system of internal controls, throughout the National Bank;
- ▶ maintaining adequate accounting records that disclose with reasonable accuracy at any time the consolidated financial position of the National Bank and which enable them to ensure that the consolidated financial statements of the National Bank comply with the requirements of the Basis of Preparation;
- ▶ maintaining statutory accounting records in compliance with legislation of the Republic of Kazakhstan;
- ▶ taking such steps as are reasonably available to them to safeguard the assets of the National Bank; and
- ▶ detecting and preventing and detecting fraud, errors and other irregularities.

The consolidated financial statements for the year ended 31 December 2021 were approved by the National Bank's Management Board on 4 April 2022.

On behalf of the Management Board of the National Bank of the Republic of Kazakhstan:

Pirmatov G.O.
Governor

4 April 2022
Nur-Sultan, Kazakhstan

Taishibayeva D.A.
Chief Accountant

4 April 2022
Nur-Sultan, Kazakhstan





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INDEPENDENT AUDITORS' REPORT

TO THE MANAGEMENT BOARD OF THE NATIONAL BANK OF THE REPUBLIC OF KAZAKHSTAN

Qualified Opinion

We have audited the consolidated financial statements of the National Bank of the Republic of Kazakhstan and its subsidiaries (the "National Bank"), which comprise the consolidated statement of financial position as at 31 December 2021, the consolidated statements of profit or loss, comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, except for the effects of the matter described in the Basis for Qualified Opinion section of our report, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the National Bank as at 31 December 2021, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with the basis of preparation described in Note 2 to the consolidated financial statements (the "Basis of Preparation").

Basis for Qualified Opinion

The National Bank has measured unquoted equity securities stated at KZT 750,000,000 thousand as at 31 December 2021 and 31 December 2020 at cost on the basis that it was unable to obtain a reliable measurement of their fair value. A reliable measure of fair value could have been obtained, and therefore such investments should have been stated at fair value in accordance with the Basis of Preparation. The effects of this departure from the Basis of Preparation on investment securities at fair value through other comprehensive income, assets, reserve for changes in fair value of financial assets, equity, other comprehensive income as at and for the years ended 31 December 2021 and 31 December 2020 have not been determined.

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the National Bank in accordance with the International Ethics Standards Board for Accountants International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code) together with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Republic of Kazakhstan, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our qualified opinion.

«КПМГ Аудит» ЖШС, Қазақстан Республикасы заңнамасына сәйкес тіркелген компания, жауапкершілігі өз қатысушыларының кепілдіктерімен шектелген KPMG International Limited жекеше ағылшын компаниясының құрамына кіретін KPMG тәуелсіз фирмалары жаһандық ұйымының қатысушысы.

KPMG Audit LLC, a company incorporated under the Laws of the Republic of Kazakhstan and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

In addition to the matter described in the Basis for Qualified Opinion section we have determined the matters described below to be the key audit matters to be communicated in our report.

Recognition of expenses on rehabilitation of the banking sector and the economy	
Key audit matter	How the matter was addressed in our audit
Refer to Note 10 to the consolidated financial statements.	
As part of its activity to ensure stability of the financial system and the economy of Kazakhstan, the National Bank implements a number of programs aimed at providing financial support to the second-tier banks and programs to support the economy. We focused on these matters due to the significance of these transactions, and also due to judgement involved in accounting for such transactions and the use of estimates and underlying assumptions in determining the fair value on initial recognition of the respective financial instruments. During the reporting period such transactions comprise, in particular, purchase of debt securities issued by financial organisations of the quasi-public sector and second-tier banks, which are recognised in the consolidated statement of financial position as loans issued in the "Placements and loans with banks and other financial institutions" caption.	We have analysed the economic substance of transactions performed and recognition and disclosure thereof in the consolidated financial statements. We have assessed the key assumptions used as a basis for estimation of the fair value of purchased bonds of financial organisations of the quasi-public sector and second-tier banks upon initial recognition, such as the discount rates. We have assessed the reasonableness of forecasted cash flows and compared the inputs, such as discount rates, against industry, financial and economic data from the external sources. We assessed whether the consolidated financial statements discloses appropriately reflect the key judgments related to initial recognition of the purchased bonds, including those judgments related to measurements of fair value upon initial recognition.

Other Information

Management is responsible for the other information. The other information comprises the information included in the Annual Report of the National Bank to the President of the Republic of Kazakhstan for the year 2021 (the "Annual Report"), but does not include the consolidated financial statements and our auditors' report thereon. The Annual Report is expected to be made available to us after the date of this auditors' report.

Our opinion on the consolidated financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.



Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the National Bank's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the National Bank or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the National Bank's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- ▶ Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- ▶ Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the National Bank's internal control.
- ▶ Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- ▶ Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the National Bank's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the National Bank to cease to continue as a going concern.



NATIONAL BANK OF THE REPUBLIC OF KAZAKHSTAN

Independent Auditors' Report

- ▶ Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation;
- ▶ Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the National Bank to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the National Bank audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditors' report is:

Assel Urdabayeva

Certified Auditor
of the Republic of Kazakhstan
Auditor's Qualification Certificate
No. МФ-0000096 of 27 August 2012

KPMG Audit LLC

State License to conduct audit # 0000021 dated
6 December 2006 issued by the Ministry of Finance of
the Republic of Kazakhstan

Sergey Dementyev

General Director of KPMG Audit LLC acting on the basis
of the Charter

4 April 2022



CONSOLIDATED STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 31 DECEMBER 2021

	Note	2021 KZT'000	2020 KZT'000
Interest income calculated using effective interest method	5	351,627,649	367,183,664
Interest expense	5	(588,903,792)	(464,594,508)
Net interest loss		(237,276,143)	(97,410,844)
Fee and commission income	6	40,128,566	24,760,756
Fee and commission expenses	7	(7,364,126)	(6,366,774)
Net fee and commission income		32,764,440	18,393,982
Net gain on financial instruments at fair value through profit or loss	8	248,333,316	95,283,203
Net gain on investment securities at fair value through other comprehensive income	9	22,606,726	40,759,957
Share of profit of associates		1,335,836	3,389,666
Expenses on rehabilitation of the banking sector and economy	10	(128,177,122)	(936,370,397)
Other operating income/(expense), net	11	17,949,829	(26,117,161)
Operating expenses		(42,463,118)	(902,071,594)
Income on recovery of/(loss) on allowance for credit losses	12	2,870,049	(162,794,967)
Provisions for estimated liabilities	33	(22,406,405)	(37,648,928)
Banknotes and coins production expenses	13	(22,389,937)	(30,558,468)
Personnel expenses	14	(24,397,644)	(23,780,793)

	Note	2021 KZT'000	2020 KZT'000
Depreciation and amortisation		(5,163,179)	(4,130,697)
Other general administrative expenses	15	(26,054,901)	(48,913,667)
Loss before income tax		(140,005,135)	(1,209,899,114)
Income tax benefit	16	19,237,436	89,716,100
Loss for the year		(120,767,699)	(1,120,183,014)
(Loss) income attributable to:			
- Equity holders of the National Bank		(120,925,235)	(1,120,376,050)
- Non-controlling interests		157,536	193,036
Loss for the year		(120,767,699)	(1,120,183,014)

On behalf of the Management Board of the National Bank of the Republic of Kazakhstan:

Pirmatov G. O.
Governor

4 April 2022
Nur-Sultan, Kazakhstan

Taishibayeva D. A.
Chief Accountant

4 April 2022
Nur-Sultan, Kazakhstan

The notes on pages 82-200 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2021

	2021 KZT'000	2020 KZT'000
Loss for the year	(120,767,699)	(1,120,183,014)
Other comprehensive income, net of income tax		
<i>Items that are or may be reclassified subsequently to profit or loss:</i>		
Movement in fair value reserve (debt instruments):		
- Net change in fair value	(49,020,525)	51,464,154
- Net change in fair value transferred to profit or loss	(17,819,146)	(32,933,329)
Total items that are or may be reclassified subsequently to profit or loss	(66,839,671)	18,530,825
Items that will not be reclassified to profit or loss:		
Movement in fair value reserve (equity instruments)	4,764,034	2,469,575
Foreign currency translation reserve	27,705,339	125,869,458
Precious metals revaluation reserve	(87,365,671)	2,652,217,250
Revaluation reserve for property and equipment	6,110,350	–
Total items that will not be reclassified to profit or loss	(48,785,948)	2,780,556,283
Other comprehensive income for the year, net of income tax	(115,625,619)	2,799,087,108
Total comprehensive (loss)/income for the year	(236,393,318)	1,678,904,094
Total comprehensive (loss)/income attributable to:		
- Equity holders of the National Bank	(236,554,717)	1,678,711,058
- Non-controlling interests	161,399	193,036
Total comprehensive (loss)/income for the year	(236,393,318)	1,678,904,094

On behalf of the Management Board of the National Bank of the Republic of Kazakhstan:

Pirmatov G. O.
Governor

4 April 2022
Nur-Sultan, Kazakhstan

Taishibayeva D. A.
Chief Accountant

4 April 2022
Nur-Sultan, Kazakhstan

The notes on pages 82-200 form an integral part of these consolidated financial statements.



CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2021

	Note	2021 KZT'000	2020 KZT'000
ASSETS			
Cash on hand in foreign currency	17	112,430,324	122,879,854
Gold	18	10,254,959,287	9,946,269,671
Placements and loans with banks and other financial institutions	19	3,195,568,022	4,630,905,561
Financial instruments under management at fair value through profit or loss	20	965,401,344	633,025,926
Reverse repurchase agreements	21	549,162,352	20,012,508
Investment securities measured at fair value through other comprehensive income			
- Pledged under sale and repurchase agreements	22	140,891,608	94,346,826
- Not pledged under sale and repurchase agreements	22	3,120,523,009	3,489,090,231
Investment securities measured at amortised cost	23	1,193,349,488	1,121,943,735
Investments in associates		7,255,451	5,683,549
Property, plant and equipment and intangible assets	24	80,626,994	70,335,177
Current tax asset		6,735,771	2,481,329
Deferred tax assets	16	346,258,930	325,613,503
Other assets	25	869,136,777	999,301,782
Total assets		20,842,299,357	21,461,889,652
LIABILITIES			
Currency in circulation	26	3,452,220,118	3,250,868,479
Deposits and balances from banks and other financial institutions	27	7,197,414,543	7,328,415,884
Financial instruments under management at fair value through profit or loss	20	1,816,270	968,165
Repurchase agreements	28	150,097,813	100,597,147
Current accounts of the National Fund of the Republic of Kazakhstan	29	1,062,130,685	441,555,267
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	30	904,928,019	1,432,152,238
Customer accounts	31	206,932,122	239,047,013

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2021

	Note	2021 KZT'000	2020 KZT'000
Debt securities issued	32	3,062,328,192	3,645,971,357
Estimated liabilities	33	61,130,493	53,056,189
Current tax liability		11,824	166
Deferred tax liabilities	16	2,610,066	2,406,638
Other liabilities	34.	31,469,566	33,833,600
Total liabilities		16,133,089,711	16,528,872,143
EQUITY			
Charter capital	35	20,000,000	20,000,000
Special guarantee reserve	35	685,322,567	598,376,004
Other provisions		4,032,306	4,032,306
Revaluation reserve for property and equipment		28,982,199	23,184,009
Reserve for changes in fair value of financial assets		(23,584,179)	41,861,301
Revaluation reserve for foreign currency and precious metals		7,573,609,256	7,633,270,564
Accumulated losses		(3,580,710,836)	(3,389,104,209)
Total equity attributable to equity holders of the National Bank		4,707,651,313	4,931,619,975
Non-controlling interests	35	1,558,333	1,397,534
Total equity		4,709,209,646	4,933,017,509
Total liabilities and equity		20,842,299,357	21,461,889,652

On behalf of the Management Board of the National Bank of the Republic of Kazakhstan:

Pirmatov G. O.
Governor

4 April 2022
Nur-Sultan, Kazakhstan

Taishibayeva D. A.
Chief Accountant

4 April 2022
Nur-Sultan, Kazakhstan

The notes on pages 82-200 form an integral part of these consolidated financial statements.



CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2021

	2021 KZT'000	2020 KZT'000
CASH FLOWS FROM OPERATING ACTIVITIES		
Loss before income tax	(140,005,135)	(1,209,899,114)
<i>Adjustments for:</i>		
Depreciation and amortisation	7,431,480	6,545,036
(Income on recovery of)/loss on allowance for credit losses	(2,903,660)	162,717,766
Provisions for estimated liabilities	22,406,405	37,648,928
Impairment loss on other non-financial assets	33,611	77,201
Loss on disposal of inventories	–	7,076
Proceeds from disposal of property, plant and equipment	(348,237)	–
Revaluation loss on property, plant and equipment	42,939	–
Interest expense on debt securities issued	384,754,150	348,204,505
Amortisation of premium and discount on financial assets	(4,657,563)	(3,516,723)
Unrealised gain on financial instruments at fair value through profit or loss	(155,420,295)	(46,888,758)
Share of profit of associates	(1,335,836)	(3,389,666)
Cash from/(used) in operating activities before changes in operating assets and liabilities	109,997,859	(708,493,749)
(Increase)/decrease in operating assets		
Gold	(398,999,399)	(61,954,557)
Placements and loans with banks and other financial institutions	117,094,257	(854,544,624)

	2021 KZT'000	2020 KZT'000
Financial instruments under management at fair value through profit or loss	(169,771,981)	(105,559,720)
Investment securities measured at fair value through other comprehensive income	306,864,182	(72,176,030)
Other assets	158,445,992	(680,306,384)
Increase/(decrease) in operating liabilities		
Currency in circulation	201,351,639	562,120,693
Deposits and balances from banks and other financial institutions	(216,994,526)	2,628,278,622
Financial instruments under management at fair value through profit or loss	802,940	(14,793)
Repurchase agreements	49,500,666	72,655,831
Current accounts of the National Fund of the Republic of Kazakhstan	620,575,418	(283,174,740)
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	(525,134,709)	1,032,140,906
Customer accounts	(32,168,601)	54,272,625
Estimated liabilities	(14,332,101)	(17,755,167)
Other liabilities	(3,743,620)	4,797,891
Net cash flows from operating activities before income tax paid	203,488,016	1,570,286,804
Income tax paid	(259,070)	(1,790,137)
Net cash flows from operating activities	203,228,946	1,568,496,667

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2021

	2021 KZT'000	2020 KZT'000
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of investment securities measured at amortised cost	(232,392,096)	(187,567,093)
Repayment of investment securities measured at amortised cost	171,143,544	64,616,231
Acquisition of property, plant and equipment and intangible assets	(22,139,686)	(8,465,639)
Proceeds from sale of property, equipment and intangible assets	401,935	73,995
Investments in capital of associates	(236,299)	–
Net cash used in investing activities	(83,222,602)	(131,342,506)
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from issue of debt securities	22,660,504,762	14,795,265,568
Repayment of debt securities issued	(23,212,157,298)	(14,783,505,350)
Interest expense on debt securities issued	(416,744,779)	(334,704,804)
Net cash used in financing activities	(968,397,315)	(322,944,586)
Net (decrease)/increase in cash and cash equivalents	(848,390,971)	1,114,209,575
Effect of changes in exchange rates on cash and cash equivalents	33,670,276	71,054,468
Cash and cash equivalents at the beginning of the year, gross	2,383,626,832	1,198,362,789
Cash and cash equivalents at the end of the year, gross (Note 17)	1,568,906,137	2,383,626,832

Interest paid and received during the year ended 31 December 2021 amounted to KZT 572,320,645 thousand and KZT 342,455,848 thousand, respectively (31 December 2020: KZT 454,858,457 thousand and KZT 287,442,537 thousand, respectively).

On behalf of the Management Board of the National Bank of the Republic of Kazakhstan:

Pirmatov G. O.
Governor

4 April 2022
Nur-Sultan, Kazakhstan

Taishibayeva D. A.
Chief Accountant

4 April 2022
Nur-Sultan, Kazakhstan

The notes on pages 82-200 form an integral part of these consolidated financial statements.



CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2021

Equity attributable to equity holders of the National Bank										
KZT'000	Charter capital	Special guarantee reserve	Other reserves	Revaluation reserve for property and equipment	Reserves for changes in fair value of financial assets	Revaluation reserve for foreign currency and precious metals	Accumulated losses	Total	Non-controlling interest	Total equity
Balance at 1 January 2021	20,000,000	598,376,004	4,032,306	23,184,009	41,861,301	7,633,270,564	(3,389,104,209)	4,931,619,975	1,397,534	4,933,017,509
Restated prior year retained earnings due to fair value remeasurement of certain assets*	-	-	-	-	-	-	12,587,640	12,587,640	-	12,587,640
Restated balance at 1 January 2021	20,000,000	598,376,004	4,032,306	23,184,009	41,861,301	7,633,270,564	(3,376,516,569)	4,944,207,615	1,397,534	4,945,605,149
Total comprehensive loss										
Loss for the year	-	-	-	-	-	-	(120,925,235)	(120,925,235)	157,536	(120,767,699)
Other comprehensive income										
Movement in fair value reserve (debt instruments):										
Net change in fair value	-	-	-	-	(49,020,525)	-	-	(49,020,525)	-	(49,020,525)
Net change in fair value transferred to profit or loss	-	-	-	-	(17,819,146)	-	-	(17,819,146)	-	(17,819,146)
Movement in fair value reserve (equity securities):										
Net change in fair value	-	-	-	-	1,394,191	-	3,369,843	4,764,034	-	4,764,034
Foreign currency translation reserve	-	-	-	-	-	27,704,363	-	27,704,363	976	27,705,339
Precious metals revaluation reserve	-	-	-	-	-	(87,365,671)	-	(87,365,671)	-	(87,365,671)
Revaluation of property and equipment	-	-	-	6,107,463	-	-	-	6,107,463	2,887	6,110,350
Total other comprehensive income	-	-	-	6,107,463	(65,445,480)	(59,661,308)	3,369,843	(115,629,482)	3,863	(115,625,619)
Total comprehensive loss for the year	-	-	-	6,107,463	(65,445,480)	(59,661,308)	(117,555,392)	(236,554,717)	161,399	(236,393,318)
Transfer of revaluation reserve resulting from depreciation and disposals	-	-	-	(309,273)	-	-	309,273	-	-	-
Transactions with owners recorded directly in equity:										
Addition to special guarantee reserve	-	86,946,563	-	-	-	-	(86,946,563)	-	-	-
Additional paid-in capital of subsidiaries	-	-	-	-	-	-	(1,585)	(1,585)	-	(1,585)
Decrease in non-controlling interest	-	-	-	-	-	-	-	-	(600)	(600)
Total transactions with owners	-	86,946,563	-	-	-	-	(86,948,148)	(1,585)	(600)	(2,185)
Balance at 31 December 2021	20,000,000	685,322,567	4,032,306	28,982,199	(23,584,179)	7,573,609,256	(3,580,710,836)	4,707,651,313	1,558,333	4,709,209,646

* As the effect is immaterial, restatement was reflected only in the consolidated statement of changes in equity



CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2021

Equity attributable to equity holders of the National Bank											
	KZT'000	Charter capital	Special guarantee reserve	Other reserves	Revaluation reserve for property and equipment	Reserves for changes in fair value of financial assets	Revaluation reserve for foreign currency and precious metals	Accumulated losses	Total	Non-controlling interest	Total equity
Balance 1 January 2020		20,000,000	500,764,758	4,032,306	23,623,561	22,271,185	4,855,183,856	(2,184,530,568)	3,241,345,098	1,204,365	3,242,549,463
Restated prior year retained earnings due to fair value remeasurement of certain assets *		-	-	-	-	-	-	11,296,364	11,296,364	-	11,296,364
Restated balance at 1 January 2020		20,000,000	500,764,758	4,032,306	23,623,561	22,271,185	4,855,183,856	(2,173,234,204)	3,252,641,462	1,204,365	3,253,845,827
Total comprehensive income		-	-	-	-	-	-	-	-	-	-
Loss for the year		-	-	-	-	-	-	(1,120,376,050)	(1,120,376,050)	193,036	(1,120,183,014)
Other comprehensive income											
Movement in fair value reserve (debt instruments):											
Net change in fair value		-	-	-	-	51,464,154	-	-	51,464,154	-	51,464,154
Net amount transferred to profit or loss		-	-	-	-	(32,933,329)	-	-	(32,933,329)	-	(32,933,329)
Movement in fair value reserve (equity securities):											
Net change in fair value		-	-	-	-	1,059,291	-	1,410,284	2,469,575	-	2,469,575
Foreign currency translation reserve		-	-	-	-	-	125,869,458	-	125,869,458	-	125,869,458
Precious metals revaluation reserve		-	-	-	-	-	2,652,217,250	-	2,652,217,250	-	2,652,217,250
Total other comprehensive income		-	-	-	-	19,590,116	2,778,086,708	1,410,284	2,799,087,108	-	2,799,087,108
Total comprehensive income for the year		-	-	-	-	19,590,116	2,778,086,708	(1,118,965,766)	1,678,711,058	193,036	1,678,904,094
Transfer of revaluation reserve resulting from depreciation and disposals		-	-	-	(439,552)	-	-	443,128	3,576	133	3,709
Transactions with owners recorded directly in equity:											
Addition to special guarantee reserve		-	97,611,246	-	-	-	-	(97,611,246)	-	-	-
Additional paid-in capital of subsidiaries		-	-	-	-	-	-	2,041	2,041	-	2,041
Disposal of subsidiary		-	-	-	-	-	-	261,838	261,838	-	261,838
Total transactions with owners		-	97,611,246	-	-	-	-	(97,347,367)	263,879	-	263,879
Balance at 31 December 2020		20,000,000	598,376,004	4,032,306	23,184,009	41,861,301	7,633,270,564	(3,389,104,209)	4,931,619,975	1,397,534	4,933,017,509

* As the effect is immaterial, restatement was reflected only in the consolidated statement of changes in equity.

On behalf of the Management Board of the National Bank of the Republic of Kazakhstan:

Pirmatov G. O.
Governor

4 April 2022
Nur-Sultan, Kazakhstan

Taishibayeva D. A.
Chief Accountant

4 April 2022
Nur-Sultan, Kazakhstan

The notes on pages 82-200 form an integral part of these consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2021

1. INTRODUCTION

Organisation and operations

These consolidated financial statements comprise the consolidated financial statements of the National Bank of the Republic of Kazakhstan (the “NBK”) and its subsidiaries (together referred to as the “National Bank”).

The NBK was established in accordance with the Resolution of the Supreme Council of the Republic of Kazakhstan No. 2134-XII dated 13 April 1993. Pursuant to this Resolution the State Bank of Kazakh SSR was renamed as the National Bank of the Republic of Kazakhstan.

The primary role of the NBK is to ensure stability of prices in the Republic of Kazakhstan. The NBK is imposed with the following tasks: development and implementation of the monetary policy of the state; ensuring functioning of payment systems; exchange regulation and exchange control; ensuring stability of the financial system; conducting statistical activities in the field of monetary statistics and external sector statistics; other functions in accordance with the laws of the Republic of Kazakhstan and the acts of the President of the Republic of Kazakhstan.

In accordance with the tasks imposed thereon, the National Bank exercises the following principal functions: develops and implements the monetary policy in the Republic of Kazakhstan; acts as a sole issuer of banknotes and coins in the Republic of Kazakhstan and manages currency in circulation on the territory of the Republic of Kazakhstan; exercises currency regulation and currency control in the Republic of Kazakhstan; ensures management of the foreign currency assets and precious metals; performs trust management of the National Fund the Republic of Kazakhstan based on the trust agreement entered into between the NBK and the Government of the Republic of Kazakhstan; performs trust management of the pension assets of “Unified National Pension Fund” JSC (“UNPF”) based on the trust agreement entered into between the NBK and UNPF; exercises other functions and performs other duties as provided for by the Law “On the National Bank of the Republic of Kazakhstan”, other laws of the Republic of Kazakhstan and Decrees of the President of the Republic of Kazakhstan.

The NBK’s head office is registered at 57A Mangilik El avenue, Nur-Sultan, Z05T8F6, Republic of Kazakhstan. As at 31 December 2021 the NBK operates 18 branches, 1 representative office in Almaty and has 11 subsidiaries in the Republic of Kazakhstan.



1. INTRODUCTION, CONTINUED

(a) Organisation and operations, continued

Below is the list of all NBK subsidiaries registered in the Republic of Kazakhstan:

Name	Year of establishment	Principal activity	Ownership interest, %	
			2021	2020
RSE "Kazakhstan Mint of the National Bank of the Republic of Kazakhstan"	1994	Coin manufacturing	100.00	100.00
RSE "Kazakhstan Centre of Inter-Bank Settlements of the National Bank of the Republic of Kazakhstan"	1996	Electronic cash transfers	100.00	100.00
RSE "Banking Service Bureau of the National Bank of the Republic of Kazakhstan"	1996	Software maintenance and development	100.00	100.00
Kazakhstan Deposit Guarantee Fund JSC (KDIF)	1999	Individual deposit guarantee	100.00	100.00
RSE "Banknote Factory of the National Bank of the Republic of Kazakhstan"	2004	Banknote manufacturing	100.00	100.00

Name	Year of establishment	Principal activity	Ownership interest, %	
			2021	2020
Center for the Development of Payment and Financial Technologies of the National Bank of the Republic of Kazakhstan JSC	2007	Provision of research and advisory services for the National Bank in the field of payment and financial technologies	100.00	100.00
Center of Activities Maintenance of the National Bank of Kazakhstan JSC	2011	Transportation services, economic activity on property management	100.00	100.00
National Investment Corporation of the National Bank of Kazakhstan JSC (NIC NBK JSC)	2012	Management of assets of the National Fund of the Republic of Kazakhstan, gold and foreign currency assets of the NBK and management of pension assets	100.00	100.00
State Credit Bureau JSC	2012	Generation of credit histories and issued of credit reports	100.00	100.00
Kazakhstan Sustainability Fund JSC (KSF)	2017	Ensuring financial stability of the banking sector through financial support of second-tier banks and economy	100.00	100.00
Central Securities Depository JSC	1996	Depository activity	63.24	63.24

Since 2019 the investments in KASE JSC are classified as investments in associates.

Based on the Resolution of the NBK dated 23 December 2019, a decision was made to reorganise MO Baspana JSC through its merger with another subsidiary of the NBK – KSF JSC, in the Q1 2020. The merger occurred in February 2020.

Due to relocation of the NBK to Nur-Sultan city in June 2020, a decision was made to open the Permanent Representative Office of the National Bank in Almaty city (hereinafter, the "Representative Office"), and the structure of the Representative Office and Regulation on the Office were approved.

1. INTRODUCTION, CONTINUED

(b) Kazakhstan business environment

The National Bank's operations are primarily located in Kazakhstan. Consequently, the National Bank is exposed to the economic and financial markets of the Republic of Kazakhstan which display characteristics of an emerging market. Legal, tax and regulatory frameworks continue to develop, but are subject to varying interpretations and frequent changes that, together with other legal and fiscal impediments, contribute to the challenges faced by entities operating in Kazakhstan.

The volatility in the global price of oil and the COVID-19 pandemic have also increased the level of uncertainty in the business environment. A military conflict of recent weeks in Ukraine has further increased the level of economic uncertainties in Kazakhstan.

To continue as a going concern, the National Bank keeps carrying out its operations using a remote access and takes measures to protect health of the employees working on site, including provision of the individual protective devices, observance of distancing regime, and disinfection of the National Bank's premises.

The consolidated financial statements reflect management's assessment of the impact of the Kazakhstan business environment on the operations and the financial position of the National Bank. The future business environment may differ from management's assessment.

2. BASIS OF PREPARATION

(a) Statement of compliance

In accordance with the Law of the Republic of Kazakhstan No. 2155 dated 30 March 1995 "On the National Bank of the Republic of Kazakhstan" the NBK determines its accounting policies based on International Financial Reporting Standards ("IFRS").

These consolidated financial statements have been prepared to present fairly the consolidated financial position of the National Bank and the results of its operations and have been prepared in accordance with the accounting policy of the NBK which was approved by the Board of Directors of the National Bank on 27 June 2013 and which the National Bank considers to be appropriate given the nature of central bank activity. The accounting policy of the National Bank is based on IFRS issued by the International Accounting Standards Board ("IASB") and Interpretations issued by the International Financial Reporting Interpretations Committee ("IFRIC") with principal modifications as described below:

- ▶ gold and gold deposits are revalued based on market value of gold; gains resulting from mark to market of gold and foreign currency assets and liabilities are recognised as other comprehensive income within equity. Losses resulting from revaluation are recognised in profit or loss except to the extent that they reverse a previous revaluation increase recognised as other comprehensive income directly in equity, in which case they are recognised in other comprehensive income;
- ▶ to perform the role and functions of the central bank and given the fact that results of investment securities management are achieved by both obtaining the contractual cash flows and their sales, these debt financial assets in the NBK portfolio, which are under external management, are classified into the category as "measured at fair value through other comprehensive income", despite the fact that before 2018 these debt financial assets, which are in the NBK portfolio of assets under external management, were classified as "measured at fair value through profit or loss" managed on a fair value basis in accordance with IAS 39.



2. BASIS OF PREPARATION, CONTINUED

(b) Basis of measurement

The consolidated financial statements are prepared on the historical cost basis except that gold, financial instruments at fair value through profit or loss, investment securities measured at fair value through other comprehensive income and buildings, constructions, land plots and vehicles are stated at revalued amounts.

(c) Functional and presentation currency for the purposes of consolidated financial statements

The functional currency of the National Bank and its subsidiaries is the Kazakhstan tenge (KZT) as, being the national currency of the Republic of Kazakhstan, it reflects the economic substance of the majority of underlying events and circumstances relevant to them. The Kazakhstan tenge is also the presentation currency for the purposes of these consolidated financial statements.

Financial information presented in KZT is rounded to the nearest thousand.

(d) Use of estimates and judgements

The preparation of consolidated financial statements in conformity with IFRSs requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from those estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Judgements

Information about critical judgements in applying accounting policies that have the most significant effect on the amounts recognised in the financial statements is included in the following notes:

- ▶ classification of financial assets: assessment of the business model within which the assets are held and assessment of whether the contractual terms of the financial asset are solely payments of principal and interest on the principal amount outstanding – Note 3(g)(i);
- ▶ establishing the criteria for determining whether credit risk on the financial asset has increased significantly since initial recognition, determining methodology for incorporating forward-looking information into measurement of expected credit losses (“ECL”) and selection and approval of models used to measure ECL – Note 4;
- ▶ statement of compliance – Note 2;
- ▶ accounting for expenses on rehabilitation of the banking sector and the economy – Note 10.

2. BASIS OF PREPARATION, CONTINUED

(d) Use of estimates and judgements, continued

Assumptions and estimations uncertainty

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment in the consolidated financial statements for the year ended 31 December 2021 is included in the following notes:

- ▶ impairment of financial instruments: determining inputs into the ECL measurement model, including incorporation of forward-looking information – Note 4;
- ▶ fair value of subordinated and coupon bonds upon initial recognition – Note 10;
- ▶ financial assets and liabilities: fair value and accounting classifications – Note 42.

3. SIGNIFICANT ACCOUNTING POLICIES

The National Bank has consistently applied the following accounting policies to all periods presented in these consolidated financial statements.

(a) Basis of consolidation

(i) Subsidiaries

Subsidiaries are investees controlled by the National Bank. The National Bank controls an investee when it is exposed to, or has rights to, variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. In particular, the National Bank consolidates investees that it controls on the basis of de facto circumstances. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

(ii) Funds management

The National Bank manages and administers assets held in investment vehicles on behalf of investors. The financial statements of these entities are not included in these consolidated financial statements except when the National Bank controls the entity.

(iii) Associates

Associates are those entities in which the National Bank has significant influence, but not control, over the financial and operating policies. The consolidated financial statements include the National Bank's share of the total recognised gains and losses of associates on an equity accounted basis, from the date that significant influence effectively commences until the date that significant influence effectively ceases. When the National Bank's share of losses exceeds the National Bank's interest (including long-term loans) in the associate, that interest is reduced to nil and recognition of further losses is discontinued except to the extent that the National Bank has incurred obligations in respect of the associate.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(a) Basis of consolidation, continued

(iv) Transactions eliminated on consolidation

Intra-group assets and liabilities, equity, income, expenses and cash flows associated with transactions between the subsidiaries, between the NBK and subsidiaries are eliminated in preparing the consolidated financial statements.

(v) Non-controlling interest

Non-controlling interests are the equity in a subsidiary not attributable, directly or indirectly, to the NBK.

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from the equity attributable to equity holders of the NBK. Non-controlling interests in profit or loss and total comprehensive income are separately disclosed in the consolidated statements of income and comprehensive income.

(b) Gold

Gold comprises gold deposits with foreign banks and gold bullion in depositories. Gold is measured at market price at the reporting date in the consolidated financial statements. Market price is based on the morning fixing set by London Bullion Market Association ("LBMA"). Gains on revaluation of gold are recorded directly in other comprehensive income. Losses resulting from revaluation are recognised in profit or loss except to the extent that they reverse a previous revaluation increase recognised as other comprehensive income directly in equity, in which case they are recognised in other comprehensive income. Revaluation of gold is not transferred to profit or loss.

(c) Foreign currency

Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated to the functional currency at the exchange rate at that date. Gain on foreign currency differences arising on retranslation of monetary assets and liabilities to foreign currency are recognised in other comprehensive income. Losses resulting from revaluation of monetary assets and liabilities are recognised in profit or loss except to the extent that they reverse a previous revaluation increase recognised as other comprehensive income directly in equity, in which case it is recognised in other comprehensive income. Revaluation of foreign currency is not transferred to profit or loss. Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are retranslated to the functional currency at the exchange rate at the date that the fair value is determined.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(d) Cash and cash equivalents

Cash and cash equivalents include notes and coins on hand, unrestricted balances (nostro accounts) held with other banks, and highly liquid financial assets with original maturities of less than three months, which are subject to insignificant risk of changes in their fair value, and are used by the National Bank in the management of short-term commitments.

(e) Interest income and expenses

Effective interest rate

Interest income and expense are recognised in profit or loss using the effective interest method. The 'effective interest rate' is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument to:

- ▶ the gross carrying amount of the financial asset; or
- ▶ the amortised cost of the financial liability.

When calculating the effective interest rate for financial instruments other than purchased or originated credit-impaired assets, the National Bank estimates future cash flows considering all contractual terms of the financial instrument, but not expected credit losses. For purchased or originated credit-impaired financial assets, a credit-adjusted effective interest rate is calculated using estimated future cash flows including expected credit losses.

The calculation of the effective interest rate includes transaction costs and fees and points paid or received that are an integral part of the effective interest rate. Transaction costs include incremental costs that are directly attributable to the acquisition or issue of a financial asset or financial liability.

Amortised cost and gross carrying amount

The 'amortised cost' of a financial asset or financial liability is the amount at which the financial asset or financial liability is measured on initial recognition minus the principal repayments, plus or minus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount and, for financial assets, adjusted for any loss allowance.

The 'gross carrying amount of a financial asset' measured at amortised cost is the amortised cost of a financial asset before adjusting for any expected credit loss allowance.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(e) Interest income and expense, continued

Calculation of interest income and expense

The effective interest rate of a financial asset or financial liability is calculated on initial recognition of a financial asset or a financial liability. In calculating interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the asset is not credit-impaired) or to the amortised cost of the liability. The effective interest rate is revised as a result of periodic re-estimation of cash flows of floating rate instruments to reflect movements in market rates of interest.

However, for financial assets that have become credit-impaired subsequent to initial recognition, interest income is calculated by applying the effective interest rate to the amortised cost of the financial asset. If the asset is no longer credit-impaired, then the calculation of interest income reverts to the gross basis.

For financial assets that were credit-impaired on initial recognition, interest income is calculated by applying the credit-adjusted effective interest rate to the amortised cost of the asset. The calculation of interest income does not revert to a gross basis, even if the credit risk of the asset improves.

For information on when financial assets are credit-impaired, see Note 3(g)(iv).

Presentation

Interest income calculated using the effective interest method presented in the consolidated statement of profit or loss includes:

- ▶ interest on financial assets measured at amortised cost;
- ▶ interest on debt securities measured at FVOCI.

Interest expense presented in the consolidated statement of profit or loss includes financial liabilities measured at amortised cost.

Interest income on non-derivative debt financial assets measured at fair value through profit or loss included in "Net gain on financial instruments at fair value through profit or loss" in the consolidated statement of profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(f) Fees and commission

Fee and commission income and expense that are integral to the effective interest rate on a financial asset or financial liability are included in the effective interest rate (see Note 3(e)).

Fee and commission income, including investment management fees, pension asset management fees, fiduciary assets fees and financial markets management and transfer operations, is recognised as the related services are performed.

Other fee and commission expenses mainly include fees related to asset management, brokerage and custody fees, which are expensed as the related services are received.

Dividend income is recognised in profit or loss on the date that the dividend is declared.

(g) Financial instruments

Classification of financial instruments

Financial assets

On initial recognition, a financial asset is classified as measured at: amortised cost, FVOCI or FVTPL.

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated by the National Bank as at FVTPL:

- ▶ the asset is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- ▶ the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt instrument is measured at FVOCI only if it meets both of the following conditions and is not designated by the National Bank as at FVTPL, except for the modifications to the accounting policy as described in Note 2(a):

- ▶ the asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- ▶ the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding (SPPI).

For debt financial assets measured at FVOCI, gains and losses are recognised in other comprehensive income, except for the following, which are recognised in profit or loss in the same manner as for financial assets measured at amortised cost:

- ▶ interest revenue using the effective interest method;
- ▶ expected credit losses and reversals.

When a debt financial asset measured at FVOCI is derecognised, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(g) Financial instruments, continued

Classification, continued

Financial assets, continued

On initial recognition of an equity investment that is not held for trading, the National Bank may irrevocably elect to present subsequent changes in fair value in other comprehensive income. This election is made on an investment-by-investment basis.

Gains and losses on such equity instruments are never reclassified to profit or loss and no impairment is recognised in profit or loss.

Dividends are recognised in profit or loss unless they clearly represent a recovery of part of the cost of the investment, in which case they are recognised in other comprehensive income. Cumulative gains and losses recognised in other comprehensive income are transferred to retained earnings (accumulated losses) on disposal of an investment.

All other financial assets are classified as measured at FVTPL.

Business model assessment

The National Bank makes an assessment of the objective of a business model in which an asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered by the National Bank includes:

- ▶ the stated policies and objectives for the portfolio and the operation of those policies in practice. In particular, whether management's strategy focuses on earning contractual interest revenue, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of the liabilities that are funding those assets or realising cash flows through the sale of the assets;
- ▶ how the performance of the portfolio is evaluated and reported to the National Bank's management;
- ▶ the risks that affect the performance of the business model (and the financial assets held within that business model) and how those risks are managed;
- ▶ how managers of the business are compensated – e.g. whether compensation is based on the fair value of the assets managed or the contractual cash flows collected;
- ▶ the frequency, volume and timing of sales in prior periods, the reasons for such sales and its expectations about future sales activity. However, information about sales activity is not considered in isolation, but as part of an overall assessment of how the NBK stated objective for managing the financial assets is achieved and how cash flows are realised.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(g) Financial instruments, continued

Classification, continued

Financial assets, continued

Assessment whether contractual cash flows are solely payments of principal and interest

For the purposes of this assessment, 'principal' is defined as the fair value of the financial asset on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest ("SPPI criterion"), the National Bank considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making the assessment, NBK considers:

- ▶ contingent events that would change the amount and timing of cash flows;
- ▶ leverage features;
- ▶ prepayment and extension terms;
- ▶ terms that limit the National Bank's claim to cash flows from specified assets (e.g. non-recourse asset arrangements); and
- ▶ features that modify consideration of the time value of money – e.g. periodical reset of interest rates.

Reclassification

Financial assets are not reclassified subsequent to their initial recognition, except in the period after the National Bank changes its business model for managing financial assets.

Financial liabilities

Financial liabilities are not reclassified subsequent to their initial recognition.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(g) Financial instruments, continued

(ii) Derecognition, continued

Financial assets

The National Bank derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the National bank neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

On derecognition of a financial asset, the difference between the carrying amount of the asset (or the carrying amount allocated to the portion of the asset derecognised) and the sum of (i) the consideration received (including any new asset obtained less any new liability assumed) and (ii) any cumulative gain or loss that had been recognised in other comprehensive income is recognised in profit or loss.

Any cumulative gain/loss recognised in other comprehensive income in respect of equity investment securities designated as at FVOCI is not recognised in profit or loss on derecognition of such securities. Any interest in transferred financial assets that qualify for derecognition that is created or retained by the National Bank is recognised as a separate asset or liability.

The National Bank enters into transactions whereby it transfers assets recognised on its consolidated statement of financial position, but retains either all or substantially all of the risks and rewards of the transferred assets or a portion of them. In such cases, the transferred assets are not derecognised. Examples of such transactions are securities lending and sale-and-repurchase transactions.

Financial liabilities

The National Bank derecognises a financial liability when its contractual obligations are discharged, or cancelled or expire.

(iii) Modification of financial assets and financial liabilities

Financial assets

If the terms of a financial asset are modified, the National Bank evaluates whether the cash flows of the modified asset are substantially different. If the cash flows are substantially different (referred to as 'substantial modification'), then the contractual rights to cash flows from the original financial asset are deemed to have expired. In this case, the original financial asset is derecognised and a new financial asset is recognised at fair value plus any eligible transaction costs. Any fees received as part of the modification are accounted for as follows:

- ▶ fees that are considered in determining the fair value of the new asset and fees that represent reimbursement of eligible transaction costs are included in the initial measurement of the asset; and
- ▶ other fees are included in profit or loss as part of the gain or loss on derecognition.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(g) Financial instruments, continued

(iii) Modification of financial assets and financial liabilities, continued

Financial assets, continued

Changes in cash flows on existing financial assets or financial liabilities are not considered as modification, if they result from existing contractual terms.

The National Bank performs a quantitative and qualitative evaluation of whether the modification is substantial, i.e. whether the cash flows of the original financial asset and the modified or replaced financial asset are substantially different. The National Bank assesses whether the modification is substantial based on quantitative and qualitative factors in the following order: qualitative factors, quantitative factors, combined effect of qualitative and quantitative factors.

If the cash flows are substantially different, then the contractual rights to cash flows from the original financial asset deemed to have expired. In making this evaluation the National Bank analogises to the guidance on the derecognition of financial liabilities.

The National Bank concludes that the modification is substantial as a result of the following qualitative factors:

- ▶ change the currency of the financial asset;
- ▶ change in collateral or other credit enhancement;
- ▶ change of terms of financial asset that lead to non-compliance with SPPI criterion (e.g. inclusion of conversion feature).
- ▶ If cash flows are modified when the counterparty/issuer is in financial difficulties, then the objective of the modification is usually to maximise recovery of the original contractual terms rather than to originate a new asset with substantially different terms.

If the National Bank plans to modify a financial asset in a way that would result in forgiveness of cash flows, then it first considers whether a portion of the asset should be written off before the modification takes place (see below for write off policy). This approach impacts the result of the quantitative evaluation and means that the derecognition criteria are not usually met in such cases. The National Bank further performs qualitative evaluation of whether the modification is substantial.

If the modification of a financial asset measured at amortised cost or FVOCI does not result in derecognition of the financial asset, then the National Bank first recalculates the gross carrying amount of the financial asset using the original effective interest rate of the asset and recognises the resulting adjustment as a modification gain or loss in profit or loss. For floating-rate financial assets, the original effective interest rate used to calculate the modification gain or loss is adjusted to reflect current market terms at the time of the modification.

Any costs or fees incurred and fees received as part of the modification adjust the gross carrying amount of the modified financial asset and are amortised over the remaining term of the modified financial asset.

If such a modification is carried out because of financial difficulties of the counterparty/issuer, then the gain or loss is presented together with impairment losses. In other cases, it is presented as interest income calculated using the effective interest method (Note 3(e)).

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(g) Financial instruments, continued

(iii) Modification of financial assets and financial liabilities, continued

Financial liabilities

The National Bank derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different. In this case, a new financial liability based on the modified terms is recognised at fair value.

The difference between the carrying amount of the financial liability extinguished and the new financial liability with modified terms is recognised in profit or loss. Consideration paid includes non-financial assets transferred, if any, and the assumption of liabilities, including the new modified financial liability.

The National Bank assesses whether the modification is substantial based on quantitative and qualitative factors in the following order: qualitative factors, quantitative factors, combined effect of qualitative and quantitative factors.

The National Bank concludes that the modification is substantial as a result of the following qualitative factors:

- ▶ change the currency of the financial liability;
- ▶ inclusion of conversion feature.

For the quantitative assessment the terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective interest rate, is at least 10 per cent different from the discounted present value of the remaining cash flows of the original financial liability.

If the modification of a financial liability is not accounted for as derecognition, then the amortised cost of the liability is recalculated by discounting the modified cash flows at the original effective interest rate and the resulting gain or loss is recognised in profit or loss. For floating-rate financial liabilities, the original effective interest rate used to calculate the modification gain or loss is adjusted to reflect current market terms at the time of the modification.

Any costs and fees incurred are recognised as an adjustment to the carrying amount of the liability and amortised over the remaining term of the modified financial liability by re-computing the effective interest rate on the instrument.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(g) Financial instruments, continued

(iv) Impairment

See also Note 4.

The National Bank recognises loss allowances for expected credit losses (ECL) on the following financial instruments that are not measured at FVTPL:

- ▶ financial assets that are debt instruments;
- ▶ financial guarantee contracts issued;

No impairment loss is recognised on equity investments.

The National Bank measures loss allowances at an amount equal to lifetime ECLs, except for the following, which are measured at 12-month ECLs:

- ▶ debt investment securities that are determined to have low credit risk at the reporting date; and
- ▶ other financial instruments on which credit risk has not increased significantly since their initial recognition (see Note 4).

The National Bank considers a debt investment security to have low credit risk when its credit risk rating is equivalent to the globally understood definition of 'investment grade'.

12-month ECL are the portion of ECL that result from default events on a financial instrument that are possible within the 12 months after the reporting date. Financial instruments for which a 12-month ECL is recognised are referred to as 'Stage 1' financial instruments.

Lifetime ECLs are the ECLs that result from all possible default events over the expected life of the financial instrument.

Financial instruments for which a lifetime ECL is recognised are referred to as 'Stage 2' financial instruments (if credit risk on financial instruments has increased significantly upon initial recognition but financial instrument is not credit-impaired) and 'Stage 3' (if financial instrument is credit-impaired).

ECL measurement

ECL are a probability-weighted estimate of credit losses. They are measured as follows:

- ▶ financial assets that are not credit-impaired at the reporting date: as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the National Bank in accordance with the contract and the cash flows that the National Bank expects to receive);
- ▶ financial assets that are credit-impaired at the reporting date: as the difference between the gross carrying amount and the present value of estimated future cash flows;
- ▶ financial guarantee contracts: the present value of expected payments to reimburse the holder less any amounts that the National Bank expects to recover.

See also Note 4.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(g) Financial instruments, continued

(iv) Impairment, continued

Restructured financial assets

If the terms of a financial asset are renegotiated or modified or an existing financial asset is replaced with a new one due to financial difficulties of the counterparty/issuer, then an assessment is made of whether the financial asset should be derecognised and ECL are measured as follows.

- ▶ If the expected restructuring will not result in derecognition of the existing asset, then the expected cash flows arising from the modified financial asset are included in calculating the cash shortfalls from the existing asset (see Note 4).
- ▶ If the expected restructuring will result in derecognition of the existing asset, then the expected fair value of the new asset is treated as the final cash flow from the existing financial asset at the time of its derecognition. This amount is included in calculating the cash shortfalls from the existing financial asset that are discounted from the expected date of derecognition to the reporting date using the original effective interest rate of the existing financial asset.

Credit-impaired financial assets

At each reporting date, the National Bank assesses whether financial assets carried at amortised cost and debt financial assets carried at FVOCI are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:

- ▶ significant financial difficulty of the counterparty or issuer;
- ▶ a breach of contract such as a default or past due event;
- ▶ the restructuring of a loan or advance by the National Bank on terms that the National Bank would not consider otherwise;
- ▶ it is becoming probable that the counterparty will enter bankruptcy or other financial reorganisation; or
- ▶ the disappearance of an active market for a security because of financial difficulties.

A loan that has been renegotiated due to a deterioration in the borrower's condition is usually considered to be credit-impaired unless there is evidence that the risk of not receiving contractual cash flows has reduced significantly and there are no other indicators of impairment. In addition, a loan that is overdue for 90 days or more is considered impaired.

In making an assessment of whether an investment in sovereign debt (other financial assets) is credit-impaired, the National Bank considers the following factors:

- ▶ the market's assessment of creditworthiness as reflected in the bond yields;
- ▶ the rating agencies' assessments of creditworthiness;
- ▶ the country's ability to access the capital markets for new debt issuance;
- ▶ the probability of debt being restructured, resulting in holders suffering losses through voluntary or mandatory debt forgiveness;
- ▶ the international support mechanisms in place to provide the necessary support as 'lender of last resort' to that country, as well as the intention, reflected in public statements, of governments and agencies to use those mechanisms. This includes an assessment of the depth of those mechanisms and, irrespective of the political intent, whether there is the conformity with the required criteria.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(g) Financial instruments, continued

(iv) Impairment, continued

Presentation of allowance for ECL in the consolidated statement of financial position

Loss allowances for ECL are presented in the consolidated statement of financial position as follows:

- ▶ financial assets measured at amortised cost: as a deduction from the gross carrying amount of the assets;
- ▶ debt instruments measured at FVOCI: no loss allowance is recognised in the consolidated statement of financial position because the carrying amount of these assets is their fair value. However, the loss allowance is disclosed and is recognised in the fair value reserve.

Write-off

Loans and debt securities are written off (either partially or in full) when there is no reasonable expectation of recovering a financial asset in its entirety or a portion thereof. This is generally the case when the National Bank determines that the counterparty does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. This assessment is carried out at the individual asset level.

Recoveries of amounts previously written off are included in 'other operating income' in the consolidated statement of profit or loss.

Financial assets that are written off could still be subject to enforcement activities in order to comply with the National Bank's procedures for recovery of amounts due.

Non-integral financial guarantee contracts

The second-tier bank accession agreement to the system of compulsory deposit insurance is recognised as a financial guarantee contract under IFRS 9 Financial Instruments and is also within the scope of IAS 32 Financial Instruments: Presentation.

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument. Therefore, contingent liabilities to pay the amount of compensation to the depositors of a member bank as a result of its default constitute a financial guarantee contract.

After initial recognition, the financial guarantee contract is subsequently measured at the higher of:

- 1) the loss allowance; and
- 2) the amount initially recognised less, when appropriate, total income recognised in accordance with IAS 15 Revenue from Contracts with Customers.

Indemnity payments are made only in case of a member bank's default in accordance with the terms of the accession agreement under which the guarantee is provided.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(g) Financial instruments, continued

(v) Repurchase and reverse repurchase agreements

Expected credit losses are recognised in the statement of financial position in the respective liability accounts. Any adjustments are subsequently recognised in profit or loss.

In case of a member bank's default, the amount of accrued provisions to cover financial guarantees of the bank being liquidated is reclassified to the indemnity account, when sufficient. If the amount is insufficient, it is charged to provisions account to cover the financial guarantee, and then reclassified to the indemnity account.

Securities sold under sale and repurchase (repo) agreements are accounted for as secured financing transactions, with the securities retained in the consolidated statement of financial position and the counterparty liabilities are recorded as repo agreements in the separate line of the consolidated statement of financial position. The difference between the sale and repurchase prices represents interest expense and is recognised in profit or loss over the term of the repo agreement using the effective interest method.

Securities purchased under agreements to resell (reverse repo) are recorded as reverse repurchase agreements in the separate line of the consolidated statement of financial position. The difference between the purchase and resale prices represents interest income and is recognised in profit or loss over the term of the reverse repo agreement using the effective interest method.

(vi) Derivatives

Derivative financial instruments include swaps, forwards, futures and options in interest rates, foreign exchanges, precious metals and stock markets, and any combinations of these instruments.

Derivatives are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. All derivatives are carried as assets when their fair value is positive and as liabilities when their fair value is negative.

Changes in the fair value of derivatives are recognised immediately in profit or loss.

Although the National Bank trades in derivative instruments for risk hedging purposes, these instruments do not qualify for hedge accounting.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(g) Financial instruments, continued

(vii) Offsetting

Financial assets and liabilities of the National Bank are offset and the net amount reported in the consolidated statement of financial position when there is a legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously.

(h) Currency in circulation

Currency in circulation is recorded in the consolidated statement of financial position at nominal value.

Currency in circulation is recorded as a liability when cash is issued by the National Bank to commercial banks. Banknotes and coins in national currency held in the vaults and cash offices are not included in the currency in circulation.

Banknotes and coins production expense include expenses for security, transportation, insurance and other expenses. Banknotes and coins production expense are recognised upon delivery to the vaults and recorded as a separate item in the consolidated income statement.

(i) Placements and loans with banks and other financial institutions

'Placements and loans with banks and other financial institutions' caption in the consolidated statement of financial position includes:

- ▶ loans to banks and placements with banks measured at amortised cost (see Note 3(g)(i)); they are initially measured at fair value plus incremental direct transaction costs, and subsequently at their amortised cost using the effective interest method;
- ▶ loans to banks mandatorily measured at FVTPL due to non-compliance with the SPPI-criterion (see Note 3(g)(i)) are measured at fair value with changes recognised immediately in profit or loss.

(j) Investment securities

The 'investment securities' caption, presented in line items such as "Financial instruments under management at fair value through profit or loss", "Investment securities at fair value through other comprehensive income" and "Investment securities measured at amortised cost" in the consolidated statement of financial position include:

- ▶ debt investment securities measured at amortised cost (see Note 3(g)(i)); these are initially measured at fair value plus incremental direct transaction costs, and subsequently at their amortised cost using the effective interest method;
- ▶ debt and equity investment securities mandatorily measured at FVTPL or designated as at FVTPL (see Note 3(g)(i) and (g)(v)); these are measured at fair value with changes recognised immediately in profit or loss;
- ▶ debt securities measured at FVOCI (see Note 3(g)(i)); and
- ▶ equity investment securities designated as at FVOCI (see Note 3(g)(i)).

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(k) Deposits of banks and other financial institutions, debt securities issued

Deposits of banks and other financial institutions, debt securities issued are initially measured at fair value minus incremental direct transaction costs, and subsequently measured at their amortised cost using the effective interest method.

Debt securities issued are recognised in accounting as at the transaction date.

(l) Special guarantee reserve

According to the Law of the Republic of Kazakhstan “On the obligatory guarantee of deposits placed in the second tier banks of the Republic of Kazakhstan” (with amendments dated 24 November 2015) the subsidiary of the National Bank – KDIF JSC is due to compensate the participating banks’ depositors amounts up to a certain level in case of forced liquidation of a participating bank. The National Bank establishes a reserve of guarantee funds to accumulate contributions of the banks that participate in the deposit guarantee scheme.

(m) Fiduciary assets

The National Bank provides custody services that result in holding of assets on behalf of third parties. These assets and income arising thereon are not recognised in these consolidated financial statements as they are not assets of the National Bank. Commissions received from such business are shown within fee and commission income in profit or loss.

(n) Property, plant and equipment

(i) Owned assets

Items of property and equipment are stated in the consolidated financial statements at cost less accumulated depreciation and impairment losses, except for buildings, constructions, land plots and vehicles, which are stated at revalued amounts as described below.

Where an item of property and equipment comprises major components having different useful lives, they are accounted for as separate items of property and equipment.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(n) Property, plant and equipment, continued

(ii) Revaluation

Buildings, constructions, land plots and motor vehicles are subject to revaluation once per five years and if their carrying amounts are significantly different (more than 25%) from their fair values. A revaluation increase on buildings, constructions, land plots and vehicles is recognised as other comprehensive income except to the extent that it reverses a previous revaluation decrease recognised in profit or loss, in which case it is recognised in profit or loss.

A revaluation decrease on buildings, constructions, land plots and vehicles is recognised in profit or loss except to the extent that it reverses a previous revaluation increase recognised as other comprehensive income directly in equity, in which case it is recognised in other comprehensive income.

(iii) Depreciation

Depreciation is charged to profit or loss on a straight-line basis over the estimated useful lives of the individual assets. Depreciation of the equipment of RSE "Banknote Factory of National Bank of the Republic of Kazakhstan" and RSE "Kazakhstan Mint of the National Bank of the Republic of Kazakhstan" used in production of the banknotes and coins is charged to profit and loss on a unit of production method over the expected output of the individual assets.

Depreciation commences on the date of acquisition or, in respect of internally constructed assets, from the time an asset is completed and ready for use. Land is not depreciated. The estimated useful lives are as follows:

Buildings and constructions	1 to 100 years;
Furniture and equipment	5 to 25 years;
Computers	3 to 8 years;
Vehicles	7 to 25 years.

(o) Intangible assets

Acquired intangible assets are stated at cost less accumulated amortisation and impairment losses.

Amortisation is charged to profit or loss on a straight-line basis over the estimated useful lives of intangible assets. The estimated useful lives range from 1 to 10 years.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(p) Impairment of assets

Non-financial assets

Non-financial assets, other than deferred taxes, are assessed at each reporting date for any indications of impairment. The recoverable amount of non-financial assets is the greater of their fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

An impairment loss is recognised when the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount.

All impairment losses in respect of non-financial assets are recognised in profit or loss and reversed only if there has been a change in the estimates used to determine the recoverable amount. Any impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

(q) Credit related commitments

In the normal course of business, the National Bank enters into credit related commitments, comprising letters of credit and guarantees.

Financial guarantees are contracts that require the National Bank to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the terms of a debt instrument.

Financial guarantees issued are initially measured at fair value. Subsequently, they are measured at the higher of the loss allowance determined in accordance with IFRS 9 (see Note 3(g)(iv)) and the amount initially recognised less, when appropriate, the cumulative amount of income recognised in accordance with the principles of IFRS 15.

(r) Taxation

In accordance with legislation of the Republic of Kazakhstan, the NBK is exempt from income tax and value-added tax.

Subsidiaries and associate organisations of the NBK are subject to all taxes.

Income tax comprises current and deferred tax. Income tax is recognised in profit or loss except to the extent that it relates to items of other comprehensive income or transactions with shareholders recognised directly in equity, in which case it is recognised within other comprehensive income or directly within equity.

Current tax expense is the expected tax payable on the taxable income for the year, using tax rates enacted or substantially enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(r) Taxation, continued

Deferred tax assets and liabilities are recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax assets and liabilities are not recognised for the following temporary differences: goodwill not deductible for tax purposes, the initial recognition of assets or liabilities that affect neither accounting nor taxable profit and temporary differences related to investments in subsidiaries, where the parent is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The measurement of deferred tax assets and liabilities reflects the tax consequences that would follow the manner in which the National Bank expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date.

Deferred tax assets are recognised only to the extent that it is probable that future taxable profits will be available against which the temporary differences, unused tax losses and credits can be utilised. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

(s) Segment reporting

Activity of the National Bank represents one operating segment for the purposes of IFRS 8 Operating Segments. An operating segment is a component of the National Bank that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses related to transactions with other components of the National Bank); whose operating results are regularly reviewed by the chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available.

(t) Leases

At inception of a contract, the National Bank assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the National Bank uses the definition of a lease in IFRS 16.

As a lessee

At commencement or on modification of a contract that contains a lease component, the National Bank allocates the consideration in the contract to each lease component on the basis of its relative stand-alone prices. The National Bank recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(t) Leases, continued

As a lessee, continued

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the National Bank by the end of the lease term or the cost of the right-of-use asset reflects that the National Bank will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the National Bank's incremental borrowing rate. Generally, the National Bank uses its incremental borrowing rate as the discount rate.

The National Bank determines its incremental borrowing rate by obtaining interest rates from various external and internal sources and if necessary, makes certain adjustments to reflect the terms of the lease and type of the asset leased.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the National Bank's estimate of the amount expected to be payable under a residual value guarantee, if the National Bank changes its assessment of whether it will exercise a purchase, extension or termination option or if there is a revised in-substance fixed lease payment.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

(u) Standards issued but not yet effective

A number of new standards and amendments to standards are effective for annual periods beginning after 1 January 2022 and earlier application is permitted; however, the NBK has not early adopted the new or amended standards in preparing these consolidated financial statements.

Other standards

The following new and amended standards are not expected to have a significant impact on the consolidated financial statements of the National Bank.

- ▶ Onerous contracts – Cost of Fulfilling a Contract (Amendments to IAS 37).
- ▶ Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12).
- ▶ COVID-19-Related Rent Concessions beyond 30 June 2021 (Amendment to IFRS 16).
- ▶ Property, Plant and Equipment: Proceeds before Intended Use (Amendments to IAS 16).
- ▶ Reference to Conceptual Framework (Amendments to IFRS 3).

3. SIGNIFICANT ACCOUNTING POLICIES, CONTINUED

(v) Standards issued but not yet effective, continued

Other standards, continued

- ▶ Classification of Liabilities as Current or Non-current (Amendments to IAS 1).
- ▶ IFRS 17 Insurance Contracts.
- ▶ Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2).
- ▶ Definition of Accounting Estimates (Amendments to IAS 8).

4. FINANCIAL RISK REVIEW

This note presents information about the National Bank's exposure to financial risks. For information on the National Bank's financial risk management framework, see Note 37.

Credit risk – Amounts arising from ECL

Inputs, assumptions and techniques used for estimating impairment

See accounting policy in Note 3(g)(iv).

Significant increase in credit risk

When determining whether the risk of default on a financial instrument has increased significantly since initial recognition, the National Bank considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the National Bank's historical experience and expert credit assessment and including forward-looking information.

4. FINANCIAL RISK REVIEW

Credit risk – Amounts arising from ECL, continued

Significant increase in credit risk, continued

The objective of the assessment is to identify whether a significant increase in credit risk has occurred for an exposure by comparing:

- ▶ the remaining lifetime probability of default (PD) as at the reporting date; and
- ▶ the remaining lifetime PD for this point in time that was estimated on initial recognition of the exposure.

Assessing whether credit risk has increased significantly since initial recognition of a financial instrument requires identifying the date of initial recognition of the instrument.

The National Bank uses three criteria for determining whether there has been a significant increase in credit risk:

- ▶ quantitative criteria;
- ▶ qualitative indicators.

Credit risk grades

The National Bank allocates each exposure to a credit risk grade based on a variety of data that is determined to be predictive of the risk of default and applying experienced credit judgement. The National Bank will use these credit risk grades to identify significant increase in credit risk in accordance with IFRS 9. The credit risk grades are defined using qualitative and quantitative factors that are indicative of the risk of default. These factors vary depending on the nature of the exposure and the type of counteragent.

Credit risk grades are defined and calibrated such that the risk of default occurring increases exponentially as the credit risk deteriorates so, for example, the difference in risk of default between credit risk grades 1 and 2 is smaller than the difference between credit risk grades 2 and 3.

Each exposure is allocated to a credit risk grade at initial recognition based on available information about the borrower and assigned external credit rating according to international credit rating agencies. Exposures are subject to ongoing monitoring, which may result in an exposure being moved to a different credit risk grade. The monitoring typically involves use of the following data.

- ▶ data from credit reference agencies, press articles, changes in external credit ratings;
- ▶ information obtained during periodic review of counterparty files – e.g. audited financial statements, management accounts, budgets and projections;
- ▶ payment record – this includes overdue status;
- ▶ quoted bond and credit default swap (CDS) prices for the issuer where available;
- ▶ existing and forecast changes in business, financial and economic conditions;
- ▶ actual and expected significant changes in the political, regulatory and technological environment of the borrower or in its business activities.

4. FINANCIAL RISK REVIEW, CONTINUED

Credit risk – Amounts arising from ECL, continued

Generating the term structure of PD

Credit risk grades are a primary input into the determination of the term structure of PD for exposures. The National Bank collects performance and default information about its credit risk exposures analysed by region and by type of counterparty as well as by credit risk grading. The National Bank mainly uses information purchased from external credit reference agencies.

Determining whether credit risk has increased significantly

The National Bank assesses whether credit risk has increased significantly since initial recognition at each reporting period. Determining whether an increase in credit risk is significant depends on the characteristics of the financial instrument and the borrower, and the geographical region.

Significant increase in credit risk – change in the credit rating of a financial asset by two grades relative to the credit rating at the date of initial recognition of the financial asset and (or) if there is breach of contract and (or) if there are outstanding payments overdue by 30-89 calendar days, which are related to the liabilities to the National Bank.

Definition of default

The National Bank considers a financial asset to be in default when:

- ▶ the counterparty/issuer is unlikely to pay its credit obligations to the National Bank in full, without recourse by the National Bank to actions such as realising security (if any is held);
- ▶ the counterparty is past due more than 90 days on any material credit obligation to the National Bank.
- ▶ In assessing whether a counterparty/issuer is in default, the National Bank considers indicators that are:
 - ▶ qualitative – e.g. breaches of covenant;
 - ▶ quantitative – e.g. overdue status and non-payment on another obligation of the same issuer to the National Bank; and
- ▶ based on data developed internally and obtained from external sources.

Inputs into the assessment of whether a financial instrument is in default and their significance may vary over time to reflect changes in circumstances.

Incorporation of forward-looking information

The National Bank incorporates forward-looking information into both the assessment of whether the credit risk of an instrument has increased significantly since its initial recognition and the measurement of ECL.

The National Bank has identified and documented key drivers of credit risk and credit losses for each portfolio of financial instruments and, using an analysis of historical data, has estimated relationships between macro-economic variables and credit risk and credit losses. The National Bank also uses the forecast of international rating agencies (Rating Outlook) when calculating the correction of the forecast PD, based on the current rating of the counterparty/securities issuer.

4. FINANCIAL RISK REVIEW, CONTINUED

Incorporating of forward-looking information, continued

Macroeconomic analysis is carried out on the basis of data on forecasts of changes in unemployment, gross domestic income of the country, data on energy and non-energy indices, the stock index of countries and changes in the share of financial assets with a reduced credit rating in the overall portfolio of financial assets of the National Bank.

Macroeconomic analysis for each country of a financial asset is taken into account when transforming the indicators of TTC PD (Through-the-Cycle PD) into the indicators of PIT PD (Point-in-Time PD).

Country/Indicator	Source	2022	2023	2024	2025	2026
Kazakhstan						
GDP rate growth	IMF	4%	6%	4%	3%	4%
	S&P	4%	4%	4%	4%	4%
	World Bank	4%	5%	5%	5%	5%
Unemployment rate growth	IMF	-2%	0%	0%	0%	0%
	S&P	0%	0%	0%	0%	0%
Other countries						
GDP rate growth	IMF	from 1% to 9%	from 1% to 7%	from 1% to 7%	from 1% to 7%	from 1% to 7%
	S&P	from -1% to 8%	from 0% to 7%	from 0% to 7%	from 0% to 7%	from 0% to 7%
	World Bank	from 2% to 8%	from 1% to 6%	from 1% to 6%	from 1% to 6%	from 1% to 6%
Unemployment rate growth	IMF	from -35% to 13%	from -14% to 5%	from -9% to 3%	from -7% to 3%	from -9% to 6%
	S&P	from -36% to 6%	from -25% to 1%	from -22% to 13%	0%	0%
Indicators used for all countries		2022	2023	2024	2025	2026
Change in the energy index	World Bank	1%	-15%	-2%	-2%	-2%
Change in the non-energy index	World Bank	-4%	-5%	-4%	-1%	-1%

Modified financial assets

The contractual terms of a loan may be modified for a number of reasons, including changing market conditions and other factors not related to a current or potential credit deterioration of the counterparty. An existing loan whose terms have been modified may be derecognised and the renegotiated loan recognised as a new loan at fair value in accordance with the accounting policy set out in Note 3(g)(iii).

When the terms of a financial asset are modified and the modification does not result in derecognition, the determination of whether the asset's credit risk has increased significantly reflects comparison of:

- ▶ its remaining lifetime PD at the reporting date based on the modified terms; with
- ▶ the remaining lifetime PD estimated based on data at initial recognition and the original contractual terms.

When modification results in derecognition, a new loan is recognised and allocated to Stage 1 (assuming it is not credit-impaired at that time).

4. FINANCIAL RISK REVIEW, CONTINUED

Measurement of ECL

The key inputs into the measurement of ECL are the term structure of the following variables:

- ▶ probability of default (PD);
- ▶ loss given default (LGD); and
- ▶ exposure at default (EAD).

PD estimates are estimates at a certain date, which are calculated based on information of external credit rating agency S&P and issuer's/counterparty's economy sector and credit rating model purchased from S&P Global Market Intelligence LLC. If a counterparty or exposure migrates between rating classes, then this will lead to a change in the estimate of the associated PD.

Loss given default (LGD) is the magnitude of the likely loss if there is a default. The National Bank will estimate LGD parameters based on the history of recovery rates according to the data of international rating agencies, Bloomberg system and ECL model purchased from S&P Global Market Intelligence LLC.

To estimate allowance for expected credit losses, conservative rating assessment from rating agencies is used, i.e. the lowest rating according to international rating agencies Moody's, Fitch and S&P. Expected credit losses on financial assets are determined based on ECL forecast models.

EAD represents the positive carrying amount of claims outstanding as at the date of ECL calculation.

The National Bank will derive the EAD from the current exposure to the counterparty and potential changes to the current amount allowed under the contract. The EAD of a financial asset will be the gross carrying amount at default.

PD for financial assets in the first basket is calculated for 12 months.

For assessment of PD and LGD for financial assets in the second basket, a lifetime PD is used.

PD for financial assets in the third basket is equated to 100%.

4. FINANCIAL RISK REVIEW, CONTINUED

Credit quality analysis

The following table sets out information about the credit quality of accounts, placements with banks and other financial institutions, investment securities measured at FVOCI, investment securities measured at amortised cost, claims for repurchased loans and short-term receivables, included in other assets, as at 31 December 2021 and 31 December 2020. Unless specially indicated, for financial assets, the amounts in the table represent gross carrying amounts.

'000 KZT	31 December 2021			
	Stage 1	Stage 2	Stage 3	Total
<i>Placements and loans with banks and other financial institutions</i>				
Rated AAA	179,347,990	–	–	179,347,990
Rated from AA to AA+	1,296,052,956	4,433,850	–	1,300,486,806
Rated from A- to A+	159,399,036	–	–	159,399,036
Rated from BBB- to BBB+	856,996,771	–	–	856,996,771
Rated from BB- to BB+	86,749,813	–	–	86,749,813
Rated from B- to B+	137,023,501	–	–	137,023,501
Not rated*	175,675,559	–	44,107,393	219,782,952
Gross carrying amount	2,891,245,626	4,433,850	44,107,393	2,939,786,869
Loss allowance	(8,126,659)	(403)	(41,324,717)	(49,451,779)
Carrying amount	2,883,118,967	4,433,447	2,782,676	2,890,335,090

'000 KZT	31 December 2021			
	Stage 1	Stage 2	Stage 3	Total
<i>Investment securities at fair value through other comprehensive income</i>				
Rated AAA	115,506,177	–	–	115,506,177
Rated from AA- to AA+	757,041,536	3,125,823	–	760,167,359
Rated from A- to A+	476,944,258	22,432,179	–	499,376,437
Rated from BBB- to BBB+	1,001,688,457	85,326,018	–	1,087,014,475
Rated from BB- to BB+	20,440,543	2,477,268	–	22,917,811
Carrying amount	2,371,620,971	113,361,288	–	2,484,982,259
Loss allowance	(280,376)	(581,549)	–	(861,925)
Carrying amount – fair value**	2,371,620,971	113,361,288	–	2,484,982,259

<i>Investment securities measured at amortised cost</i>				
Rated AAA	57,703,071	–	–	57,703,071
Rated A+	103,397,484	–	–	103,397,484
Rated from BBB- to BBB+	952,116,828	–	–	952,116,828
Rated from BB- to BB+	80,356,131	–	–	80,356,131
Gross carrying amount	1,193,573,514	–	–	1,193,573,514
Loss allowance	(224,026)	–	–	(224,026)
Carrying amount	1,193,349,488	–	–	1,193,349,488

4. FINANCIAL RISK REVIEW, CONTINUED

Credit quality analysis, continued

31 December 2021				
'000 KZT	Stage 1	Stage 2	Stage 3	Total
<i>Claims for repurchased loans</i>				
Rated BB+	462,465,123	700,945	101,558	463,267,626
Rated B+	14,578,875	45,191	–	14,624,066
Rated B	332,982,914	238,576	59,894	333,281,384
Gross carrying amount	810,026,912	984,712	161,452	811,173,076
Loss allowance	(11,249)	(136)	(9,837)	(21,222)
Carrying amount	810,015,663	984,576	151,615	811,151,854

31 December 2020				
'000 KZT	Stage 1	Stage 2	Stage 3	Total
<i>Placements and loans with banks and other financial institutions</i>				
Rated AAA	876,811,611	–	–	876,811,611
Rated from AA- to AA+	1,938,016,887	5,519,290	–	1,943,536,177
Rated from A- to A+	132,218,515	–	–	132,218,515
Rated from BBB- to BBB+	753,136,673	51,505	–	753,188,178
Rated from BB- to BB+	252,140,620	15,391	–	252,156,011
Rated from B- to B	245,403,913	–	–	245,403,913
Rated from CCC- to CCC+	–	–	14,088,019	14,088,019
Not rated*	135,767,657	–	33,105,332	168,872,989
Gross carrying amount	4,333,495,876	5,586,186	47,193,351	4,386,275,413
Loss allowance	(6,017,737)	(407)	(41,567,269)	(47,585,413)
Carrying amount	4,327,478,139	5,585,779	5,626,082	4,338,690,000

4. FINANCIAL RISK REVIEW, CONTINUED

Credit quality analysis, continued

31 December 2020				
'000 KZT	Stage 1	Stage 2	Stage 3	Total
<i>Investment securities at fair value through other comprehensive income</i>				
Rated AAA	128,884,582	–	–	128,884,582
Rated from AA- to AA+	941,890,542	4,578,099	–	946,468,641
Rated from A- to A+	465,484,173	23,462,865	–	488,947,038
Rated from BBB- to BBB+	1,231,851,192	13,943,178	–	1,245,794,370
Rated from BB- to BB+	17,846,400	–	–	17,846,400
Carrying amount	2,785,956,889	41,984,142	–	2,827,941,031
Loss allowance	(551,519)	(79,088)	–	(630,607)
Carrying amount – fair value**	2,785,956,889	41,984,142	–	2,827,941,031

<i>Investment securities measured at amortised cost</i>				
Rated AAA	168,611,393	–	–	168,611,393
Rated A+	95,086,919	–	–	95,086,919
Rated from BBB- to BBB+	770,094,393	–	–	770,094,393
Rated from BB- to BB+	88,503,090	–	–	88,503,090
Gross carrying amount	1,122,295,795	–	–	1,122,295,795
Loss allowance	(352,060)	–	–	(352,060)
Carrying amount	1,121,943,735	–	–	1,121,943,735

31 December 2020				
'000 KZT	Stage 1	Stage 2	Stage 3	Total
Claims for repurchased loans				
Rated BBB-	247,142,183	2,946,144	95,052	250,183,379
Rated BB	47,073,796	16,387	–	47,090,183
Rated B+	2,949,119	22,784	–	2,971,903
Rated B	227,334,370	236,447	80,828	227,651,645
Rated B-	11,762,497	192,387	–	11,954,884
Gross carrying amount	536,261,965	3,414,149	175,880	539,851,994
Loss allowance	(68,860)	(2,498)	(14,936)	(86,294)
Carrying amount	536,193,105	3,411,651	160,944	539,765,700

31 December 2020				
'000 KZT	Stage 1	Stage 2	Stage 3	Total
Short-term receivables				
Rated BBB-	407,531,193	–	–	407,531,193
Gross carrying amount	407,531,193	–	–	407,531,193
Loss allowance	–	–	–	–
Carrying amount	407,531,193	–	–	407,531,193

* In 2021 Stage 1 (2020: Stage 1) include FPL bonds with no externally assigned credit rating. FPL is a 100% subsidiary of the Ministry of Finance of the Republic of Kazakhstan.

** Investment securities measured at fair value through other comprehensive income are stated at fair value, while the loss allowance is recognised in other comprehensive income.

5. NET INTEREST LOSS

	2021 KZT'000	2020 KZT'000
Interest income calculated using the effective interest method		
Interest income on financial assets measured at amortised cost:		
Placements and loans with banks and other financial institutions	160,740,368	150,518,982
Investment securities measured at amortised cost	93,040,754	79,844,576
Claims for repurchased loans	36,849,339	17,723,288
Reverse repurchase agreements	3,693,327	7,817,533
Interest income on financial assets measured at fair value through other comprehensive income		
Investment securities at fair value through other comprehensive income	57,303,861	111,279,285
Total interest income calculated using the effective interest method	351,627,649	367,183,664
Interest expense		
Interest expense on financial liabilities measured at amortised cost:		
Debt securities issued	(385,170,667)	(348,204,505)
Deposits and balances from banks and other financial institutions	(197,850,670)	(109,447,963)
Repurchase agreements	(3,486,301)	(4,854,777)
Deposit accounts of the Ministry of Finance of the Republic of Kazakhstan	(2,396,154)	(2,087,263)
Total interest expense on financial liabilities measured at amortised cost	(588,903,792)	(464,594,508)
	(237,276,143)	(97,410,844)

6. FEE AND COMMISSION INCOME

	2021 KZT'000	2020 KZT'000
Pension asset management fee	26,372,449	6,954,406
Asset management fee	10,750,651	15,770,431
Depository operations and servicing of financial markets and transfer operations	3,005,466	2,035,919
	40,128,566	24,760,756

Fee and commission income on asset management operations consists of income for asset management services provided to the National Fund of the Republic of Kazakhstan and State Social Insurance Fund JSC. The NBK manages the assets of these organisations investing funds received in various financial instruments in accordance with customers' instructions.

Fee and commission income on pension asset management was received from UNPF JSC. In 2021, the condition to receive interest for excess of the target yield was eliminated. During 2020 the NBK received no interest for excess of the target yield.

Income on depository operations and servicing of financial markets consists of income from core activities of Central Securities Depository JSC, Kazakhstan Stock Exchange JSC.

Income on transfer operations consists of commission income from inter-banking, money transfers and clearing operations of Kazakhstan Interbank Settlement Centre of the National Bank of Kazakhstan RSE.

7. FEE AND COMMISSION EXPENSE

	2021 KZT'000	2020 KZT'000
Asset management services	3,421,317	3,669,310
Broker operations and account maintenance fees	2,726,340	2,542,040
Custodian services	784,276	62,735
Other	432,193	92,689
	7,364,126	6,366,774

8. NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	2021 KZT'000	2020 KZT'000
Placements and loans with banks and other financial institutions measured at FVTPL – change in fair value	4,079,503	(41,153,235)
Placements and loans with banks and other financial institutions measured at FVTPL – other interest income	36,829,842	40,067,267
Assets under external management	212,576,008	94,502,925
Other derivative financial instruments:	(5,152,037)	1,866,246
	248,333,316	95,283,203

The gain generated from change in fair value of subordinated bonds is equal to KZT 4,123,273 thousand and the loss – on deposits with banks measured at fair value is equal to KZT 43,770 thousand (Note 19) (2020: loss of KZT 17,784,382 thousand and loss of KZT 23,368,853 thousand, respectively).

Other interest income comprise interest income on subordinated bonds measured at fair value and deposits with banks (Note 19) in the amount of KZT 33,341,220 thousand and KZT 3,488,622 thousand, respectively (2020: KZT 336,645,865 thousand and KZT 3,421,402 thousand, respectively).

9. NET GAIN ON INVESTMENT SECURITIES MEASURED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	2021 KZT'000	2020 KZT'000
Sale of debt investment securities	17,819,146	32,933,329
Dividends	4,787,580	7,826,628
	22,606,726	40,759,957

10. EXPENSES ON REHABILITATION OF THE BANKING SECTOR AND THE ECONOMY

During 2021 in accordance with the realisation of the Program Employment Roadmap for 2020–2021 and the Program Nurly Zher for 2020–2025 the subsidiary of the NBK, KSF JSC, purchased coupon bonds of a quasi-public sector organisation for the total amount of KZT 100,000,000 thousand and KZT 120,000,000 thousand, respectively (2020: KZT 700,000,000 thousand and KZT 270,000,000 thousand, respectively), bearing interest rates of 7% and 4% per annum, respectively (2020: 6% and 4% per annum), with an obligation of their repayment in 10 years and 20 years, respectively (2020: 10-12 and 2-20 years, respectively). The National Bank recognised such bonds at fair value on initial recognition (Note 19), determined using estimated market interest rates from 9.65% to 10.77% per annum, respectively (2020: 9.49% to 12.13% per annum and 11.19% to 13.19% per annum, respectively). The difference of KZT 22,424,141 thousand and KZT 59,622,346 thousand between the nominal value and fair value at the date of initial recognition was recognised in 2021 (2020: KZT 223,609,525 thousand and KZT 82,138,809 thousand, respectively) in profit or loss as expenses on rehabilitation of the banking sector and the economy.

In addition, during 2021, the coupon bonds of one quasi-public sector organisation purchased under the Nurly Zher Program in 2020 had their maturity date changed from 2022 to 2024. Due to a significant modification of the circulation terms, the National Bank derecognised old coupon bonds and recognised new financial assets. Therefore, the fair value at initial recognition of these coupon bonds was determined using the estimated market interest rate of 13.19% per annum, which resulted in recognition of the loss of significant modification to the terms and conditions in the amount of KZT 25,697,608 thousand, which was recognised in 2021 in profit or loss as expenses on rehabilitation of the banking sector and the economy.

Additionally, during 2021 in accordance with the Program on Improving the financial stability of the banking sector, coupon bonds of a quasi-public sector organisation were purchased for the total amount of KZT 6,536,981 thousand (2020: one quasi-public sector organisation and second-tier banks for the total amount of KZT 226,520,653 thousand), bearing interest rate of 10% per annum (2020: 0.1% to 10.85% per annum), with an obligation of their repayment in 5 years (2020: 10-20 years). The National Bank has recognised such bonds at fair value at initial recognition (Note 19), determined using estimated market interest rate of 14.78% per annum (2020: from 13.72% to 20.69% per annum). The difference of KZT 1,127,162 thousand in 2021 (2020: KZT 93,666,939 thousand) between the nominal value and fair value at the date of initial recognition was recognised in profit or loss as expenses on rehabilitation of the banking sector and the economy.

Also, during 2021 for the realisation of the Mechanism of lending to priority sectors of the economy KSF JSC purchased coupon bonds of a quasi-public sector organisation and second-tier banks for the total amount of KZT 28,207,681 thousand (2020: a quasi-public sector organisation for KZT 32,024,836 thousand), bearing interest rates of 10.85% to 10.95% per annum (2020: 10.75% per annum), with an obligation of their repayment in 1-10 years (2020: 1-10 years). The National Bank has recognised such bonds at fair value on initial recognition (Note 19), determined using estimated market interest rates from 12.26% to 13.98% per annum (2020: from 10.35% to 15.83% per annum). The difference of KZT 4,626,022 thousand in 2021 (2020: KZT 5,262,159 thousand) between the nominal value and fair value at the date of initial recognition was recognised in profit or loss as expenses on rehabilitation of the banking sector and the economy.

10. EXPENSES ON REHABILITATION OF THE BANKING SECTOR AND THE ECONOMY, CONTINUED

In 2021 as part of other Government programs, KSF JSC purchased coupon bonds of quasi-public sector organisations for the total amount of KZT 1,303,774 thousand (2020: quasi-public sector organisations for KZT 9,479,994 thousand), bearing an interest rate of 0.1 % per annum (2020: 0.1 % to 5.00 % per annum), with an obligation of their repayment in 30 years (2020: 1-30 years). The National Bank has recognised such bonds at fair value at initial recognition (Note 19), determined using estimated market interest rate of 9.70 % per annum (2020: 9.46 % to 9.48 % per annum). The difference of KZT 1,217,535 thousand in 2021 (2020: KZT 828,466 thousand) between the nominal value and fair value at the date of initial recognition was recognised in profit or loss as expenses on rehabilitation of the banking sector and the economy.

In addition, during 2021 the terms of issue of previously purchased coupon bonds of second-tier banks and quasi-public sector organisations under other government programs of KSF JSC regarding extension of their maturity dates were changed. This restructuring has resulted in the modification loss in the amount of KZT 13,352,346 thousand, which was recognised in 2021 in profit or loss as expenses on rehabilitation of the banking sector and the economy.

During 2020 the maturity date for a coupon bond of one second-tier bank purchased in 2019, was extended from 2034 to 2040. This restructuring has resulted in the modification loss in the amount of KZT 35,555,736 thousand, which was recognised in 2020 in profit or loss as expenses on rehabilitation of the banking sector and the economy.

In 2021, the condition of the issue regarding the extension of the maturity date was changed for previously purchased subordinated bonds of a second-tier bank. This restructuring has resulted in the modification loss in the amount of KZT 109,962 thousand, which was recognised in 2021 in profit or loss as expenses on rehabilitation of the banking sector and the economy.

In 2020 KSF JSC purchased subordinated bonds of second-tier banks in the amount of KZT 121,829,031 thousand, bearing interest rates from 0.10 % to 4.00 % per annum, with an obligation of their repayment in 15-20 years. The National Bank has recognised such bonds at fair value at initial recognition (Note 19), determined using the estimated market interest rates from 14.60 % to 14.81 % per annum. The difference of KZT 99,545,510 thousand between the nominal value and fair value at the date of initial recognition was recognised in 2020 in profit or loss as expenses on rehabilitation of the banking sector.

In addition, during 2020 nominal interest rates for subordinated bonds of some second-tier banks, purchased in 2017, were decreased from 4.00 % to 0.01 % per annum, and maturity dates extended from 2032 to 2040. This restructuring has resulted in the modification loss in the amount of KZT 70,980,515 thousand which was recognised in profit or loss as expenses on rehabilitation of the banking sector and the economy.

All subordinated bonds were purchased in accordance with the Program on Improving the financial stability of the banking sector.

Estimated market interest rates applied are based on external credit ratings of the counterparties.

10. EXPENSES ON REHABILITATION OF THE BANKING SECTOR AND THE ECONOMY, CONTINUED

During 2018 and 2019 KSF JSC acquired bonds issued by FPL for the total amount of KZT 450,000,000 thousand and KZT 614,086,276 thousand, respectively, which were recognised at fair value at initial recognition. In December 2020 these bonds were restructured by means of a partial repurchase in exchange to the long-term deposit held with a second-tier bank and transfer of the remaining part of bonds at nominal value to the Government organisation on gratuitous basis. As the result of this restructuring the difference between the fair value of bonds at the date of restructuring in the amount of KZT 367,958,420 thousand and the fair value of the consideration received in the amount of KZT 43,175,682 thousand was recognised in profit or loss as expenses on rehabilitation of the banking sector and the economy. The remaining difference between the carrying value and the fair value of these bonds was recognised in profit or loss as allowance for expected credit losses (Note 12). The fair value of FPL bonds was determined based on the fair value of the underlying assets of FPL with applying the haircut discounts of between 10% to 20% to the appraised value of the assets and a delay of 12 to 24 months in obtaining proceeds from the sale of these assets.

11. OTHER OPERATING INCOME/(EXPENSES), NET

	2021 KZT'000	2020 KZT'000
Deposits under the Program of mortgage loans refinancing	(35,412,416)	(71,218,797)
Contributions of banks participating in the guarantee system, net	48,760,297	39,172,057
Sale of printed products	2,331,057	1,428,796
Sale of collection coins and repurchase of measured bullions	1,826,763	1,857,431
Sale of medals, badges and jewellery	473,225	447,566
Rent of property and equipment	2,574	2,612
Other (expense)/income, net	(31,671)	2,193,174
	17,949,829	(26,117,161)

According to the Order of the Ministry of Finance of the RK dated 29 December 2017, No.765 "On Further Implementation of the Program of Refinancing of Mortgage Housing Loans/Mortgage Loans" the implementation of functions of the Program of Refinancing of Mortgage Housing Loans/Mortgage Loans dated 24 April 2015, No.69 (hereinafter, the "Program of Mortgage Loans Refinancing") was transferred from FPL JSC to KSF JSC without compensation. As part of this Program of Mortgage Loans Refinancing, targeted placement of deposits is provided with the second-tier banks at the interest rates of 0.10 % and 2.99 % per annum and maturity of up to 20 years.

During 2021 and 2020 KSF JSC placed deposits in certain banks with low interest rates. In 2021 the loss of KZT 32,182,214 thousand was recognised on deposits as the resulted difference between the nominal value and fair value at the date of initial recognition of these deposits calculated using the market interest rates from 9.6 % to 15.16 % per annum (2020: the loss of KZT 67,989,718 thousand using the interest rates from 11.59 % to 15.16 % per annum). The amount of KZT 35,412,416 thousand (2020: KZT 71,218,797 thousand) also includes reimbursement of expenses of KZT 3,230,202 thousand incurred by the second-tier banks on the state duties charged on the claims filed to the court with regard to the borrowers' loans due to refinancing of the problem loans denominated in foreign currency (2020: KZT 3,229,079 thousand).

Contributions of the banks participating in the guarantee system, net, in 2021 comprise proceeds of KDIF JSC from contributions of bank-participants, penalty and proceeds from a liquidation committee of a forcibly liquidated bank in the amount of KZT 55,210,836 thousand as well as expenses on compensation paid to depositors of forcibly liquidated banks in the amount of KZT 6,450,539 (2020: KZT 39,172,057 thousand and KZT nil, respectively).

12. INCOME ON RECOVERY OF/(LOSS ON) ALLOWANCE FOR CREDIT LOSSES

	2021 KZT'000	2020 KZT'000
Placements and loans with banks and other financial institutions (Note 19)	3,207,035	(164,417,961)
Investment securities measured at amortised cost	128,050	588,765
Investment securities at fair value through other comprehensive income	(216,207)	766,311
Other financial assets	(280,290)	(334,853)
Claims for repurchased loans	65,072	679,972
Inventories	(25,452)	(65,228)
Other non-financial assets	(8,159)	(11,973)
	2,870,049	(162,794,967)

13. BANKNOTES AND COINS PRODUCTION EXPENSES

	2021 KZT'000	2020 KZT'000
Banknotes production	12,677,100	8,354,828
Coins production	9,404,193	21,438,694
Other	308,644	764,946
	22,389,937	30,558,468

Banknotes and coins production expenses for 2021 include depreciation charge of equipment of KZT 685,559 thousand (2020: KZT 1,417,263 thousand).

14. PERSONNEL EXPENSES

	2021 KZT'000	2020 KZT'000
Payroll	13,801,036	12,775,050
Bonuses	8,612,490	8,966,328
Social tax	1,268,200	1,453,955
Insurance	522,667	434,950
Training	138,959	87,287
Other	54,292	63,223
	24,397,644	23,780,793

15. OTHER GENERAL AND ADMINISTRATIVE EXPENSES

	2021 KZT'000	2020 KZT'000
Information and other services	17,356,858	39,436,119
Communication	2,250,511	2,213,393
Taxes other than income tax	1,634,136	1,287,232
Repair and maintenance of property and equipment	1,271,426	1,346,875
Short-term rent expenses	559,806	546,642
Gratuitous assignment of property	437,045	935,755
Property and equipment and inventories	436,100	529,356
Security	361,806	360,239
Utilities	342,317	304,171
Representation expenses	216,725	185,669
Business trip expenses	214,415	378,346
Transportation	112,997	230,962
Insurance of property and equipment	61,398	62,063
Advertising, announcements and presentations in mass media	37,984	51,685
Depreciation and amortisation	7,074	339,049
Other	754,303	706,111
	26,054,901	48,913,667

16. INCOME TAX BENEFIT

In accordance with legislation of the Republic of Kazakhstan, the NBK is exempt from income tax. Subsidiaries and associate organisations of the NBK are subject to income tax.

	2021 KZT'000	2020 KZT'000
Current income tax expense	(1,428,473)	(1,625,922)
Movement in deferred tax assets due to origination and reversal of temporary differences	20,665,909	91,342,022
Total income tax benefit	19,237,436	89,716,100

In 2021 the applicable tax rate for current and deferred tax is 20 % (2020: 20 %).

Reconciliation of effective tax rate for the year ended 31 December:

	2021 KZT'000	%	2020 KZT'000	%
Loss before income tax	(140,005,135)		(1,209,899,114)	
Income tax at the applicable tax rate	28,001,027	(20.00)	241,979,823	(20.00)
Effect of non-taxable operations of the NBK	(49,077,727)	35.05	(59,000,123)	4.88
Non-taxable income on securities	11,977,907	(8.56)	7,971,652	(0.66)
Non-taxable income on activities of KDIF JSC	10,652,781	(7.61)	5,481,709	(0.45)
Non-taxable income/(non-deductible expenses) on activities of KSF JSC	17,619,298	(12.58)	(15,967,361)	1.32
Write-off of previously recognised DTA on FPL bonds	–	–	(91,158,636)	7.53
Other non-taxable income	64,150	(0.05)	409,036	(0.03)
	19,237,436	(13.74)	89,716,100	(7.42)

16. INCOME TAX BENEFIT, CONTINUED

Deferred tax assets and liabilities

Temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes give rise to deferred tax assets and deferred tax liabilities as at 31 December 2021 and 31 December 2020. Future tax benefits can be obtained only if the NBK subsidiaries are able to make a profit, from which it will be possible to offset the unused tax loss, and if there are no changes in the legislation of the Republic of Kazakhstan that adversely affect the ability of the NBK subsidiaries to use these benefits in future periods.

The NBK is not a payer of income tax.

The deductible temporary differences do not expire under current tax legislation of the Republic of Kazakhstan.

16. INCOME TAX BENEFIT, CONTINUED

Deferred tax assets and liabilities, continued

Movements in temporary differences during the years 2021 and 2020 are presented as follows:

KZT'000	Balance at 1 January 2021	Recognised in profit or loss	Recognised directly in equity	Balance at 31 December 2021
Placements and loans with banks and other financial institutions	325,340,691	20,645,261	–	345,985,952
Property, plant and equipment and intangible assets	(2,627,270)	(50,471)	(223,180)	(2,900,921)
Other assets	59,807	(203,626)	–	(143,819)
Other liabilities	406,486	5,712	(730)	411,468
Tax loss carry-forwards	216,811	269,033	–	485,844
	323,396,525	20,665,909	(223,910)	343,838,524
Unrecognised deferred tax liabilities	(189,660)	–	–	(189,660)
Recognised deferred tax assets	323,206,865	20,665,909	(223,910)	343,648,864
Deferred tax assets	325,613,503	20,673,985	(28,558)	346,258,930
Deferred tax liabilities	(2,406,638)	(8,076)	(195,352)	(2,610,066)
KZT'000	Balance at 1 January 2020	Recognised in profit or loss	Recognised directly in equity	Balance at 31 December 2020
Placements and loans with banks and other financial institutions	234,111,296	91,229,395	–	325,340,691
Property, plant and equipment and intangible assets	(2,652,467)	21,487	3,710	(2,627,270)
Debt securities issued	929,770	(929,770)	–	–
Other assets	22,654	37,153	–	59,807
Other liabilities	356,665	49,821	–	406,486
Tax loss carry-forwards	23,931	192,880	–	216,811
	232,791,849	90,600,966	3,710	323,396,525
Unrecognised deferred tax liabilities	(930,716)	741,056	–	(189,660)
Recognised deferred tax assets	231,861,133	91,342,022	3,710	323,206,865
Deferred tax assets	234,344,611	91,268,112	780	325,613,503
Deferred tax liabilities	(2,483,478)	73,910	2,930	(2,406,638)

16. INCOME TAX BENEFIT, CONTINUED

Deferred tax assets and liabilities, continued

As at 31 December 2021 deferred tax assets of KZT 345,754,161 thousand (31 December 2020: KZT 325,340,691 thousand) were recognised by the subsidiary of NBK, KSF JSC. Management of KFS JSC assessed the recoverability of deferred tax assets and concluded that KFS JSC would have sufficient taxable income after taking into account deductible temporary differences and it is appropriate to recognise deferred tax assets. The recovery of the deferred tax asset will take place upon the amortisation of the discount on these investments through an adjustment to interest income. The carrying amount of the deferred tax asset is subject to the reassessment at the end of each reporting period. KSF JSC will reduce the carrying amount of the deferred tax asset, if necessary. Therefore, at the reporting date, the deferred tax asset represents an adjustment to initial recognition and subsequent amortisation of that amount.

17. CASH AND CASH EQUIVALENTS

	2021 KZT'000	2020 KZT'000
Nostro accounts in foreign banks	905,319,981	2,238,402,909
Cash on hand in foreign currency	112,430,324	122,879,854
Reverse repurchase agreements with initial maturity of less than three months	549,162,352	20,012,508
Tenge denominated deposits with Kazakhstan banks with the original maturity of less than three months	1,182,092	1,550,029
Nostro accounts in Kazakhstan banks	805,120	759,473
Accounts with the Bank for International Settlements	6,268	6,668
Deposits in foreign banks with the original maturity of less than three months	–	15,391
Total cash and cash equivalents in the consolidated statement of cash flows	1,568,906,137	2,383,626,832

As at 31 December 2021 nostro accounts in foreign banks included restricted for use uninvested cash under management of NIC NBK JSC in the amount of KZT 40,336,981 thousand (31 December 2020: KZT 16,295,863 thousand) that was not included in cash equivalents.

18. GOLD

	2021 '000 KZT	2020 '000 KZT
Gold bullion in NBK depository	8,195,802,264	8,316,001,083
Gold deposits with foreign banks:		
- Rated AAA	–	50,779,800
- Rated AA-	–	45,902,111
- Rated from A- to A+	182,371,314	684,330,921
Total gold on deposits with foreign banks	182,371,314	781,012,832
Gold bullion in a foreign bank depository:		
- Rated AAA	708,633,295	717,707,368
- Rated A+	1,168,152,414	131,548,388
Total gold bullion in a foreign bank depository	1,876,785,709	849,255,756
	10,254,959,287	9,946,269,671

The credit ratings are presented in accordance with the standards of the rating agency Standard and Poor's or with similar standards of other international rating agencies.

19. PLACEMENTS AND LOANS WITH BANKS AND OTHER FINANCIAL INSTITUTIONS

	2021 '000 KZT	2020 '000 KZT
Placements and loans with banks and other financial institutions measured at amortised cost	2,890,335,090	4,338,690,000
Placements and loans with banks and other financial institutions measured at FVTPL	305,232,932	292,215,561
	3,195,568,022	4,630,905,561

	2021 '000 KZT	2020 '000 KZT
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MEASURED AT AMORTISED COST

Placements with foreign banks and other financial institutions

Nostro accounts in banks

- Rated AAA	179,341,723	876,804,943
- Rated from AA- to AA+	600,419,350	1,241,290,929
- Rated from A- to A+	66,111,069	68,052,184
- Rated from BBB- to BBB+	6,997,256	4,488,595
- Rated from BB- to BB+	1,698,859	2,047,425
- Rated B	109,375	87,115
Gross nostro accounts in banks	854,677,632	2,192,771,191
Allowance for expected credit losses	(589)	(1,589)
Net nostro accounts in banks	854,677,043	2,192,769,602

Other accounts and deposits

Non-invested cash under external management (Note 22)		
- Rated A+	90,979,330	61,937,952
	90,979,330	61,937,952
Accounts with International Monetary Fund	700,067,456	702,245,248
Receivables on foreign currencies transactions	30,939,624	14,786,910
Accounts with the Bank for International Settlements	6,267	6,668
Total other accounts and deposits	821,992,677	778,976,778
Total accounts and deposits in foreign banks and other financial institutions	1,676,669,720	2,971,746,380



19. PLACEMENTS AND LOANS WITH BANKS AND OTHER FINANCIAL INSTITUTIONS, CONTINUED

	2021 '000 KZT	2020 '000 KZT
Nostro accounts of subsidiaries with second tier banks		
- Rated from BB- to BB+	301,676	561,037
- Rated B	503,445	188,065
Gross nostro accounts of subsidiaries with second tier banks	805,121	749,102
Allowance for expected credit losses	–	(168)
Net nostro accounts of subsidiaries with second tier banks	805,121	748,934
Placements, loans and receivables of Kazakhstan banks and other financial institutions		
Placements with banks		
- Rated BBB-	28,964	52,601,287
- Rated from BB- to BB+	51,916,257	185,808,411
- Rated from B- to B+	6,697,096	133,798,301
- not rated	906,806	869,309
Gross placements with banks	59,549,123	373,077,308
Allowance for expected credit losses	(198,258)	(3,183,249)
Net placements with banks	59,350,865	369,894,059
Loans issued *		
- Rated BBB-	846,094,083	693,488,838
- Rated from BB- to BB+	32,833,021	63,723,747
- Rated from B- to B+	129,713,585	111,330,432
- Rated CCC-	–	14,088,019
- not rated	190,245,159	155,460,540
Gross loans issued (Note 10)	1,198,885,848	1,038,091,576
Allowance for expected credit losses	(49,252,932)	(44,400,407)
Net loans issued	1,149,632,916	993,691,169
Receivables from other financial institutions		
Receivables from "UAPF" JSC	336,237	545,354
Receivables from Ministry of Finance of the Republic of Kazakhstan	3,540,231	2,064,104
Total receivables from other financial institutions	3,876,468	2,609,458
Total placements with banks and receivables from Kazakhstan banks and other financial institutions	1,212,860,249	1,366,194,686
Gross placements and loans with banks and other financial institutions measured at amortised cost	2,939,786,869	4,386,275,413
Total allowance for expected credit losses	(49,451,779)	(47,585,413)
Net placements and loans with banks and other financial institutions measured at amortised cost	2,890,335,090	4,338,690,000

* Loans issued measured at amortised cost include FPL bonds and coupon bonds of second-tier banks and quasi-public sector organisations (Note 10).

19. PLACEMENTS AND LOANS WITH BANKS AND OTHER FINANCIAL INSTITUTIONS, CONTINUED

In December 2020 FPL bonds, purchased by KSJ JSC in 2018 and 2019, were restructured, as a result of which a difference between fair value of the bonds as at the date of restructuring and fair value of consideration received was recognised in profit or loss as expenses on rehabilitation of the banking sector and the economy (Note 10).

	2021 '000 KZT	2020 '000 KZT
MEASURED AT FVTPL		
Deposits in banks		
- Rated BB	17,668,784	15,788,599
- Rated from B- to B+	20,839,528	20,553,952
Total deposits in banks	38,508,312	36,342,551
Loans issued*		
- Rated BBB	308,533	–
- Rated BBB-	–	335,074
- Rated from B- to B+	266,416,087	255,537,936
Total loans issued (Note 10)	266,724,620	255,873,010
Total placements and loans with banks and other financial institutions measured at fair value	305,232,932	292,215,561

* Loans measured at fair value through profit or loss represent subordinated bonds of banks purchased under the program of financial support of the banking sector (Note 10). In accordance with IFRS 9, subordinated bonds were classified as mandatory at fair value through profit or loss due to non-compliance with the SPPI criterion, due to the existence of a mechanism of the exchange of subordinated debt into ordinary shares of the bank in the event of deterioration of the financial position of banks and disclosure of facts indicating assets withdrawal.

19. PLACEMENTS AND LOANS WITH BANKS AND OTHER FINANCIAL INSTITUTIONS, CONTINUED

Analysis of allowance for expected credit losses

Movement in allowance for expected credit losses for placements and loans with banks and other financial institutions for 2021 and 2020 is as follows:

'000 KZT	2021				
	Stage 1	Stage 2	Stage 3	POCI	Total
Placements and loans with banks and other financial institutions					
Balance at 1 January	6,017,737	407	41,567,269	–	47,585,413
Net movement in loss allowance	(1,105,769)	1	(242,552)	(5,073,364)	(6,421,684)
New financial assets originated or purchased*	6,263,734	–	–	–	6,263,734
Financial assets that have been derecognised	(3,049,080)	(5)	–	–	(3,049,085)
Recovery of previously written-off assets	–	–	–	5,073,364	5,073,364
Foreign exchange and other movements	37	–	–	–	37
Balance at 31 December	8,126,659	403	41,324,717	–	49,451,779

'000 KZT	2020				
	Stage 1	Stage 2	Stage 3	POCI	Total
Placements and loans with banks and other financial institutions					
Balance at 1 January	4,020,295	1,576	275,510,316	30,730,063	310,262,250
- Transfer to Stage 1	6	(6)	–	–	–
- Transfer to Stage 2	(52)	52	–	–	–
Net remeasurement of loss allowance	(1,958,067)	1,008	78,877,079	83,544,081	160,464,101
New financial assets originated or purchased*	4,222,474	5	–	–	4,222,479
Financial assets that have been derecognised	(266,418)	(2,201)	–	–	(268,619)
Write-offs	(493)	–	(312,820,126)	(124,338,231)	(437,158,850)
Recovery of previously written-off assets	–	–	–	10,064,087	10,064,087
Foreign exchange and other movements	(8)	(27)	–	–	(35)
Balance at 31 December	6,017,737	407	41,567,269	–	47,585,413

*includes new financial assets created during the year, including transfers of these assets between stages.

19. PLACEMENTS AND LOANS WITH BANKS AND OTHER FINANCIAL INSTITUTIONS, CONTINUED

During 2021 the loss allowance for bonds of DSFK Special Finance Company LLP was written off and recovered in the total amount of KZT 5,073,364 thousand (2020: loss allowance written off and recovered in the total amount of KZT 10,064,087 thousand).

In 2021 purchase by KSF JSC of FPL bonds resulted in increase in loss allowance in the total amount of KZT 5,866,713 thousand.

During 2021, the closing of the KSF JSC deposits of KZT 317,838,889 thousand with the second-tier banks resulted in decrease of loss allowance by KZT 3,022,906 thousand.

During 2020 the net remeasurement of loss allowance for FPL bonds acquired by KSF JSC in 2018 and 2019 amounted to KZT 67,064,105 thousand and KZT 93,608,168 thousand for bonds in Stage 3 and POCI bonds, respectively.

In December 2020 FPL bonds, purchased by KSF JSC in 2018 and 2019, were restructured (Note 10), which resulted in the write-off of the loss allowance in the total amount of KZT 437,158,357 thousand. As at the date of disposal of FPL bonds, the carrying value and allowance for expected credit losses of the bonds were determined based on the fair value of the underlying assets of FPL emitter with applying the haircut discounts of between 10% to 20% to the appraised value of the assets and a delay of 12 to 24 months in obtaining proceeds from the sale of these assets.

As at 31 December 2021 and 31 December 2020 the National Bank has no placements with a counterparty-banks in the amount exceeding 10% of equity.

As at 31 December 2021 the "nostro" accounts opened in local banks in the amount of KZT 805,121 thousand (31 December 2020: KZT 748,934 thousand), belong to subsidiary companies of the NBK.

As at 31 December 2021 loans amounting to KZT 41,296,297 thousand were past due for more than 90 days (31 December 2020: KZT 43,796,297 thousand) and 100% allowance was created against these loans.

20. FINANCIAL INSTRUMENTS UNDER MANAGEMENT AT FAIR VALUE THROUGH PROFIT OR LOSS

Financial instruments under management at fair value through profit or loss consisted of the following at 31 December 2021 and 31 December 2020:

	2021 '000 KZT	2020 '000 KZT
Assets		
Assets under external management		
Hedge funds, private equity and real estate funds	964,623,156	632,525,226
Futures	600,729	262,297
Forwards	126,359	238,403
Assets under own management		
Forwards	51,100	–
Total financial instruments under management at fair value through profit or loss	965,401,344	633,025,926
Liabilities		
Liabilities under external management		
Forwards	(585,958)	(467,296)
Futures	(1,214,569)	(499,811)
Liabilities under own management		
Swap	(15,743)	(1,058)
Total financial instruments under management at fair value through profit or loss	(1,816,270)	(968,165)

Investments in alternative instruments comprised investments in hedge-funds and private equity funds in accordance with the strategy of gold and foreign exchange reserves and Investment Strategy for management of portfolio of alternative instruments of the National Bank's gold and foreign currency reserves approved by the Resolution of the NBK dated 28 May 2018, No. 100, and in accordance with the terms and conditions of the Investment Trust Management Contract No.122NB/10 dated 29 March 2013 concluded between the NBK and subsidiary NIC NBK JSC. NIC NBK JSC invests a part of the gold and foreign currency reserves of the National Bank in the alternative classes of assets through the special purpose companies and/or partnerships established to invest in hedge funds, private equity funds and real estate funds.

Investments in hedge funds

Investments in the hedge funds under management of NIC NBK JSC (hereinafter, the "Portfolio of investments in hedge funds") comprise investments, which are made through the structure of the fund of funds to different investment funds established to accumulate the investors' funds to invest in accordance with certain investment strategies in various markets and in different types of financial instruments. As at 31 December 2021 and 2020, the geographical distribution of the Portfolio of investments in hedge funds falls mostly on the North America and Europe. US Dollar is the investment currency in the hedge funds. Investment funds are established in the form of the companies or partnerships. In turn, these investment funds hold a significant part of their positions in the highly liquid securities and financial derivatives which are measures at the quoted market value.

20. FINANCIAL INSTRUMENTS UNDER MANAGEMENT AT FAIR VALUE THROUGH PROFIT OR LOSS, CONTINUED

Investments in private equity funds

Investments in the private equity funds under management of NIC NBK JSC (hereinafter, the “Private Equity Portfolio”) comprise investment in the funds and co-investments with the funds through the structure of the fund of funds made to accumulate the investors’ funds to invest the share capital or securities of the invested companies. Investment funds may be established in the form of the companies or partnerships. The Private Equity Portfolio comprises the funds investing in different sectors and different regions. As at 31 December 2021 participation in direct investments in the sectors of information technology, consumer goods and services, health care, industrial and financial sectors, accounts for a major part in the Portfolio. A majority of investments falls in the North America and Western Europe. US dollar is a major currency of investments in the funds; however, there are investments denominated in euro and British pounds.

Investments in real estate funds

Investments in the real estate funds under management of NIC NBK JSC (hereinafter, the “Real Estate Portfolio”) comprise investment in the funds through the structure of the fund of funds made to earn income from rent payment and/or increase cost of real estate. Investment funds may be established in the form of the companies or partnerships. Real Estate Portfolio comprises the funds investing in various types of buildings in various regions. Investing in real estate commenced in 2018. As at 31 December 2020 a majority of investments in real estate portfolio falls in North America, Europe, and Asia. US dollar is a major currency of investments in the real estate funds; however, there are investments denominated in euro and Japanese yen.



20. FINANCIAL INSTRUMENTS UNDER MANAGEMENT AT FAIR VALUE THROUGH PROFIT OR LOSS, CONTINUED

The tables below summarises, by major currencies, the contractual amounts of the National Bank's outstanding balances from derivative transactions, as at 31 December 2021 and 31 December 2020 with details of the contracted weighted average exchange rates and remaining periods to maturity.

	Contract/ notional amount '000 KZT				Weighted-average contracted futures prices/exchange rates	
	2021		2020		2021	2020
Swap						
for the period less than 3 months						
Buy USD to KZT	19,862,800	(19,878,543)	1,154,826	(1,155,884)	432.14	421.30
Forwards for the period less than 3 months						
Buy EUR to USD	88,329,630	(88,278,530)	–	–	1.13	–
Buy USD to AUD	2,966,760	(3,013,887)	2,571,028	(2,642,983)	1.40	1.36
Buy CHF to USD	6,209,133	(6,150,689)	2,031,255	(1,995,389)	1.09	1.11
Buy USD to GBP	3,887,269	(3,947,694)	3,424,656	(3,452,615)	0.75	0.75
Buy USD to CAD	20,067,576	(20,237,045)	15,903,233	(16,029,212)	1.27	1.30
Buy USD to EUR	2,105,733	(2,111,738)	1,615,113	(1,645,639)	0.88	0.83
Buy JPY to USD	4,451,135	(4,525,927)	5,963,061	(5,938,480)	0.0088	0.0096
Buy EUR to USD	256,483	(256,464)	–	–	1.14	–
Buy CAD to USD	92,290	(92,298)	–	–	0.79	–
Buy GBP to USD	395,382	(399,172)	1,376,572	(1,369,029)	1.34	1.34
Buy CHF to USD	1,941,196	(1,928,880)	6,675,567	(6,568,853)	1.09	1.11
Buy JPY to USD	1,848,827	(1,889,917)	1,876,616	(1,875,444)	0.0089	0.0096
Buy AUD to USD	878,123	(866,531)	1,651,113	(1,615,197)	0.72	0.74
Buy CAD to USD	3,184,244	(3,140,255)	4,002,483	(3,975,872)	0.78	0.77
Buy USD to EUR	7,231,004	(7,326,989)	12,201,476	(12,408,460)	0.89	0.83
Buy USD to EUR	7,992,240	(8,079,508)	–	–	0.89	–
Buy USD to JPY	–	–	3,475,885	(3,479,778)	–	103.85
	151,837,025	(152,245,524)	62,768,058	(62,996,951)		
Futures for the period less than 3 months						
Contract in USD	165,804,919	(166,370,592)	162,239,069	(162,470,767)	1.00	1.00
Contract in EUR	36,367,129	(36,200,675)	36,541,775	(36,547,762)	0.88	0.82
Contract in JPY	568,421	(569,790)	4,310,750	(4,313,912)	115.16	103.85
Contract in GBP	6,003,688	(5,983,154)	10,359,770	(10,346,629)	0.74	0.74
Contract in CAD	11,040,710	(11,271,031)	7,331,938	(7,341,746)	1.26	1.29
Contract in AUD	4,156,145	(4,159,610)	4,364,600	(4,364,600)	1.38	1.32
	223,941,012	(224,554,852)	225,147,902	(225,385,416)		
Total	395,640,837	(396,678,919)	289,070,786	(289,538,251)		

21. REVERSE REPURCHASE AGREEMENTS

	2021 '000 KZT	2020 '000 KZT
- not rated	549,162,352	20,012,508
	549,162,352	20,012,508

The credit ratings are presented in accordance with the standards of the rating agency Standard and Poor's or with similar standards of other international rating agencies.

As at 31 December 2021 the financial assets accepted as collateral under reverse repurchase agreements comprised debt securities of KSF JSC, treasury bills of the Ministry of Finance of the Republic of Kazakhstan, bonds of the Eurasian Development Bank and notes issued by NBK. As at 31 December 2021 the fair value of these financial assets is KZT 525,082,835 thousand (31 December 2020: KZT 19,121,142 thousand).

During 2021 not rated reverse repo transactions of KZT 549,162,352 thousand were entered in the auto repo market of KASE JSC (31 December 2020: KZT 20,012,508 thousand).

22. INVESTMENT SECURITIES MEASURED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	2021 '000 KZT	2020 '000 KZT
Debt instruments		
Investments in foreign securities		
Government bonds		
US Government Treasury bonds	337,656,026	479,145,378
British Government Treasury bonds	90,503,044	79,846,362
Qatari Government bonds	78,436,530	86,512,041
Columbian Government bonds	77,026,848	74,078,171
UAE Government bonds	70,711,489	77,813,610
Indonesian Government bonds	64,209,173	82,736,717
Mexican Government bonds	62,042,682	57,717,845
Peru Government bonds	55,363,934	38,528,935
Chilean Government bonds	55,316,758	22,464,026
French Government bonds	47,333,775	54,014,331
Luxembourg Government bonds	41,968,339	–
Australian Government Treasury bonds	41,314,600	37,481,617
Philippine Government bonds	34,495,560	66,915,236
Canadian Government Treasury bonds	33,965,774	32,860,161
Polish Government Treasury bonds	22,413,147	27,784,582
German Government bonds	20,419,494	1,456,692
Japanese Government Treasury bonds	14,875,956	25,824,029
Panama Government bonds	14,443,058	16,813,276
Chinese Government bonds	10,159,459	15,598,428
Korean Government Treasury bonds	9,253,326	27,521,807
Paraguay Government bonds	9,188,571	8,667,468
Romanian Government bonds	7,988,611	1,014,001
Cayman Government bonds	5,420,369	8,743,560
Spanish Government Bonds	4,983,626	5,355,315
Malaysian Government bonds	3,673,289	6,102,685
Irish Government bonds	2,749,887	3,014,924



22. INVESTMENT SECURITIES MEASURED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME, CONTINUED

	2021 '000 KZT	2020 '000 KZT
Saudi Arabia Government bonds	2,124,478	–
Singapore Government bonds	1,833,295	1,849,349
Italian Government bonds	1,691,793	–
Hongkong Government bonds	1,345,301	10,568,144
Israeli Government bonds	146,397	331,325
Lithuanian Government bonds	–	26,134,949
Russian Federation Government bonds	–	6,436,739
Morocco Government bonds	–	3,397,695
Estonian Government bonds	–	1,428,014
Total government bonds	1,223,054,589	1,388,157,412
Debt securities of international governmental and nongovernmental financial institutions		
- Rated AAA	22,993,025	52,952,728
- Rated AA+	4,314,507	–
- Rated AA	24,774,904	64,704,662
- Rated AA-	6,477,459	4,238,946
- Rated A+	19,409,453	30,450,628
- Rated A	8,403,420	13,840,763
- Rated A-	–	1,615,227
- Rated BBB+	5,511,639	2,630,392
- Rated BBB	–	453,607
- Rated BBB-	9,849,890	2,961,843
Total investments in debt securities of international governmental and nongovernmental financial institutions	101,734,297	173,848,796

22. INVESTMENT SECURITIES MEASURED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME, CONTINUED

	2021 '000 KZT	2020 '000 KZT
Corporate bonds of international companies		
- Rated AAA	7,260,792	4,133,384
- Rated from AA- to AA+	84,564,274	44,590,617
- Rated from A- to A+	291,297,237	287,985,948
- Rated from BBB to BBB+	380,112,302	372,597,532
- Rated BB- to BB+	13,729,240	8,619,023
Total investments in corporate bonds of international companies	776,963,845	717,926,504
Total investments in foreign securities	2,101,752,731	2,279,932,712
Investments in Kazakhstan securities		
Treasury bills of Ministry of Finance of the Republic of Kazakhstan	242,337,920	453,101,583
Debt securities of Kazakhstan financial organisations	–	559,910
Pledged under sale and repurchase agreements		
Treasury bills of Ministry of Finance of the Republic of Kazakhstan	140,891,608	94,346,826
Total investments in Kazakhstan securities	383,229,528	548,008,319
Total debt investments	2,484,982,259	2,827,941,031
Equity instruments		
Shares of NC "KazMunayGas" JSC	750,000,000	750,000,000
Corporate shares	26,432,358	5,496,026
Total equity investments	776,432,358	755,496,026
Gross investment securities measured at fair value through other comprehensive income	3,261,414,617	3,583,437,057
Allowance for expected credit losses	(861,925)	(630,607)
Total investment securities measured at fair value through other comprehensive income*	3,261,414,617	3,583,437,057

* Investment securities measured at fair value through other comprehensive income are stated at fair value, while the loss allowance is recognised in other comprehensive income.

The credit ratings are presented in accordance with the standards of the rating agency Standard and Poor's or with similar standards of other international rating agencies.

As 31 December 2021 the bonds of the Ministry of Finance of the Republic of Kazakhstan with market value of KZT 140,891,608 (31 December 2020: KZT 94,346,826 thousand) were subject to a registered debenture to secure the repurchase agreements.



22. INVESTMENT SECURITIES MEASURED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME, CONTINUED

As at 31 December 2021 a portion of investment securities measured at fair value through other comprehensive income was under the management of six (31 December 2020: six) foreign asset management organisations. Depending on the mandate the managers invest into fixed income and equity instruments and are also allowed to use derivative instruments.

The portfolios under external management pursue the following investment strategies:

External manager	2021 '000 KZT	2020 '000 KZT	Strategy	Index
National Investment Corporation of the NBK JSC	175,216,070	200,547,370	Alternative instruments	MSCI ACWI Investable Market Net Total Return Index (M1WDIM) – 80% Barclays Global Aggregate Bond Index (LEGATRUH) – 20%
Amundi Corporate Bonds	115,385,963	116,817,894	Global corporate bonds of investment grade	ICE BofAML Q847 Custom Index
External manager	2021 '000 KZT	2020 '000 KZT	Strategy	Index
Nomura Asset Management U.K. Limited	356,234,813	357,970,439	Global corporate bonds of investment grade	ICE BofAML Q847 Custom Index
Wellington	111,175,717	113,090,636	Global corporate bonds of investment grade	ICE BofAML Q847 Custom Index
Aviva Investors Global Services Limited	389,975,068	389,944,946	Bonds of emerging markets in hard currency	ICE BofAML Q846 Custom Index
Deutsche Asset Management International GmbH	326,871,724	327,496,153	Bonds of emerging markets in hard currency	ICE BofAML Q846 Custom Index
Total assets under external management	1,474,859,355	1,505,867,438		

As at 31 December 2021 uninvested balances equivalent to KZT 90,979,330 thousand (31 December 2020: KZT 61,937,952 thousand), related to portfolios under external management are presented within "Placements and loans with banks and other financial institutions" (Note 19).

22. INVESTMENT SECURITIES MEASURED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME, CONTINUED

Analysis of allowance for expected credit losses

Movement in allowance for expected credit losses for investment securities measured at fair value through other comprehensive income is as follows:

'000 KZT	2021			
	Stage 1	Stage 2	Stage 3	Total
Investment securities measured at fair value through other comprehensive income				
Balance at 1 January	551,518	79,088	–	630,606
- Transfer to Stage 1	21,303	(21,303)	–	–
- Transfer to Stage 2	(18,050)	18,050	–	–
Net remeasurement of loss allowance	(228,858)	485,994	–	257,136
New financial assets originated or purchased	203,190	109,001	–	312,191
Financial assets that have been derecognised	(256,016)	(97,104)	–	(353,120)
Foreign exchange and other movements	7,289	7,823	–	15,112
Balance at 31 December	280,376	581,549	–	861,925

'000 KZT	2020			
	Stage 1	Stage 2	Stage 3	Total
Investment securities measured at fair value through other comprehensive income				
Balance at 1 January	1,223,156	76,893	–	1,300,049
- Transfer to Stage 1	51,022	(51,022)	–	–
- Transfer to Stage 2	(939,318)	939,318	–	–
Net remeasurement of loss allowance	401,860	(802,330)	–	(400,470)
New financial assets originated or purchased	547,438	66,075	–	613,513
Financial assets that have been derecognised	(842,573)	(136,781)	–	(979,354)
Foreign exchange and other movements	109,934	(13,065)	–	96,869
Balance at 31 December	551,519	79,088	–	630,607

Unquoted equity instruments

Investment securities measured at fair value through other comprehensive income comprise unquoted ordinary shares of NC "KazMunayGas" JSC for KZT 750,000,000 thousand in 2021 (2020: KZT 750,000,000 thousand), the fair value of which cannot be reliably determined. There is no market for this equity instrument and there have not been any recent transactions that provide evidence of the current fair value.



23. INVESTMENT SECURITIES MEASURED AT AMORTISED COST

	2021 '000 KZT	2020 '000 KZT
Investments in foreign securities		
Eurobonds rated AAA	49,052,000	154,570,395
Government bonds rated A+	103,397,484	95,086,919
Corporate bonds rated AAA	8,651,071	14,040,998
	161,100,555	263,698,312
Allowance for expected credit losses	(40,588)	(120,217)
Carrying amount of investments in foreign securities	161,059,967	263,578,095
Investments in Kazakhstan securities		
Bonds of the Ministry of Finance of the Republic of Kazakhstan rated BBB-	862,325,244	719,355,438
Securities of second-tier banks and other organisations	154,704,960	139,242,045
Municipal bonds of Akimat of Almaty city	15,442,755	–
	1,032,472,959	858,597,483
Allowance for expected credit losses	(183,438)	(231,843)
Carrying amount of investments in Kazakhstan securities	1,032,289,521	858,365,640
Gross investment securities	1,193,573,514	1,122,295,795
Allowance for expected credit losses	(224,026)	(352,060)
Total investment securities	1,193,349,488	1,121,943,735

Analysis of allowance for expected credit losses

Movement in allowance for expected credit losses for investment securities measured at amortised cost for 2021 and 2020 is as follows:

'000 KZT	2021	2020
	Stage 1	Stage 1
Investment securities measured at amortised cost		
Balance at 1 January	352,060	940,800
Net remeasurement of loss allowance	(134,070)	(629,926)
New financial assets originated or purchased	6,072	41,222
Financial assets that have been derecognised	(52)	(61)
Foreign exchange and other movements	16	25
Balance at 31 December	224,026	352,060

As at 31 December 2021 and 31 December 2020 the National Bank recognises loss allowances on investment securities measured at amortised cost at an amount equal to 12-month ECL.

24. PROPERTY, EQUIPMENT AND INTANGIBLE ASSETS

'000 KZT	Land, buildings and structures	Furniture and equipment	Computer equipment	Vehicles	Right-of-use asset	Construction in progress/ equipment not yet installed	Intangible assets	Total
Historical/revalued cost								
Balance as at 1 January 2021	35,230,990	35,449,509	7,280,108	2,600,893	2,809,726	4,648,960	8,702,702	96,722,888
Additions	889,186	1,987,962	336,992	-	825,398	2,767,984	4,996,380	11,803,902
Disposals	(161,093)	(542,324)	(3,869)	(53,640)	-	-	(495,975)	(1,256,901)
Write-offs	(1,665,784)	(1,083,011)	(372,354)	(605,397)	-	(27,344)	(978,454)	(4,732,344)
Revaluation	5,064,636	-	-	1,256,694	-	-	-	6,321,330
Transfers	450,280	524,012	171,393	-	-	(1,145,685)	-	-
Balance as at 31 December 2021	39,808,215	36,336,148	7,412,270	3,198,550	3,635,124	6,243,915	12,224,653	108,858,875
Depreciation and amortisation and impairment losses								
Balance as at 1 January 2021	1,190,489	16,324,406	3,369,269	657,450	805,439	-	4,040,658	26,387,711
Depreciation and amortisation for the year	776,170	2,459,153	901,148	262,119	1,415,828	-	1,617,062	7,431,480
Disposals	(139,905)	(542,324)	(3,869)	(53,640)	-	-	(482,225)	(1,221,963)
Write-offs	(1,665,784)	(1,071,471)	(371,511)	(594,903)	-	-	(661,678)	(4,365,347)
Balance at 31 December 2021	160,970	17,169,764	3,895,037	271,026	2,221,267	-	4,513,817	28,231,881
Carrying amount								
Balance as at 31 December 2021	39,647,245	19,166,384	3,517,233	2,927,524	1,413,857	6,243,915	7,710,836	80,626,994

24. PROPERTY, EQUIPMENT AND INTANGIBLE ASSETS, CONTINUED

'000 KZT	Land, buildings and structures	Furniture and equipment	Computer equipment	Vehicles	Right-of-use asset	Construction in progress/ equipment not yet installed	Intangible assets	Total
Historical/revalued cost								
Balance as at 1 January 2020	34,528,609	34,126,852	5,287,887	2,536,275	-	2,980,897	7,486,160	86,946,680
Additions	750,845	2,182,383	2,219,951	94,876	2,809,726	1,747,818	1,469,766	11,275,365
Disposals	(42,523)	(180,825)	(185,299)	(27,609)	-	(63,306)	(70,249)	(569,811)
Write-offs	(5,941)	(678,901)	(42,431)	(2,649)	-	(16,449)	(182,975)	(929,346)
Balance as at 31 December 2020	35,230,990	35,449,509	7,280,108	2,600,893	2,809,726	4,648,960	8,702,702	96,722,888
Depreciation and amortisation and impairment losses								
Balance as at 1 January 2020	582,721	14,396,001	2,694,700	456,835	-	-	3,137,580	21,267,837
Depreciation and amortisation for the year	656,249	2,791,888	905,452	229,707	805,439	-	1,156,301	6,545,036
Disposals	(42,541)	(184,632)	(187,959)	(27,660)	-	-	(70,249)	(513,041)
Write-offs	(5,940)	(678,851)	(42,924)	(1,432)	-	-	(182,974)	(912,121)
Balance at 31 December 2020	1,190,489	16,324,406	3,369,269	657,450	805,439	-	4,040,658	26,387,711
Carrying amount								
Balance as at 31 December 2020	34,040,501	19,125,103	3,910,839	1,943,443	2,004,287	4,648,960	4,662,044	70,335,177

There are no capitalised borrowing costs related to the acquisition or construction of property and equipment during 2021 and 2020.

24. PROPERTY, EQUIPMENT AND INTANGIBLE ASSETS, CONTINUED

Depreciation expenses in the amount of KZT 5,163,179 thousand (2020: KZT 4,130,697 thousand) were included in depreciation and amortisation expenses, KZT 7,074 thousand (2020: KZT 339,049 thousand) – in other general and administrative expenses, KZT 685,559 thousand (2020: KZT 1,417,263 thousand) – in banknotes and coins production expenses, KZT 555,608 thousand (2020: KZT 641,534 thousand) – in fee and commission income, KZT 1,020,060 thousand (2020: KZT 16,493 thousand) – in other operating income.

Revalued assets

During 2021, land plots, buildings, structures and vehicles owned by the National Bank were revalued.

As at 31 December 2020 buildings, constructions and vehicles owned by the National Bank were not revalued.

The fair values of the National Bank's land plots, buildings, structures and vehicles are categorised into Level 2 of the fair value hierarchy.

Should the land plots, buildings, constructions and vehicles not be revalued, then their carrying amounts as at 31 December 2021 would have been KZT 13,408,388 thousand (31 December 2020: KZT 12,588,036 thousand).

25. OTHER ASSETS

	2021 '000 KZT	2020 '000 KZT
Claims for repurchased loans	811,173,076	539,851,994
Short-term receivables	–	407,531,193
Other receivables	18,889,860	26,467,506
Gross other financial assets	830,062,936	973,850,693
Allowance for expected credit losses on claims on repurchased loans	(21,222)	(86,294)
Charge of allowance for expected credit losses on other financial assets	(807,730)	(546,715)
Allowance for expected credit losses	(828,952)	(633,009)
Total other financial assets	829,233,984	973,217,684
Inventories	17,367,670	17,952,756
Refined and non-refined precious metals and stones	4,439,518	3,254,765
Prepayments for property, plant and equipment	17,684,438	1,670,486
Prepayment for banknotes and coins production	6,110	823,635
Other	405,057	2,382,456
Total other non-financial assets	39,902,793	26,084,098
Total other assets	869,136,777	999,301,782

Claims on repurchased mortgage loans include amounts receivable from commercial bank-partners for purchased rights of claim on KZT-denominated mortgage loans.

25. OTHER ASSETS, CONTINUED

KSF JSC is an Operator of two socially significant programs on mortgage loans financing: “7-20-25. New Opportunities for Housing Purchase for Each Family” and “Baspana Hit”. “Baspana Hit” program (conclusion of the bank loan agreements) was in effect until the end of 2021. During 2021 KSF JSC purchased mortgage loan portfolios from nine second-tier banks (2020: KSF JSC purchased mortgage loan portfolios from eight second-tier banks).

As at 31 December 2021 the volume of claims on repurchased loans was KZT 811,173,076 thousand (2020: KZT 539,851,994 thousand). As at 31 December 2021 the allowance for expected credit losses on claims on repurchased loans amounted to KZT 21,222 thousand (31 December 2020: KZT 86,294 thousand).

In accordance with the terms of agreements with bank-partners, they are obligated to repurchase the rights of claim to loans if there is a delay in the payment of principal debt and interest for a period of more than 90 days.

As at 31 December 2020 short-term receivables in the amount of KZT 407,531,193 thousand comprise of claims to the second-tier banks under the Program of concessional lending for small and medium-size enterprises (the “Program”), distributed among second-tier banks – participants of the Program, on special accounts with the NBK for further lending to business entities.

Under the Program, cash placed as a conditional deposit with the second-tier banks at an interest rate of 5% per annum as at 31 December 2020, is disclosed under the caption “Placements and loans with banks and other financial institutions” of the consolidated statement of financial position (Note 19).

The purpose of the placement is issuance of loans and financing under credit line facilities of enterprises to replenish working capital for a period of not exceeding 12 months at a preferential interest rate of 8% per annum, who suffered as a result of the introduction of a state of emergency in the Republic of Kazakhstan, starting from March 2020.

As at 31 December 2020 the short-term receivables are included in Stage 1 of the credit risk grade.

Analysis of allowance for expected credit losses

Movement in allowance for expected credit losses for repurchased loans for 2021 and 2020 is as follows:

'000 KZT	2021			
	Stage 1	Stage 2	Stage 3	Total
Claims for repurchased loans				
Balance at 1 January	68,860	2,498	14,936	86,294
Transfer to Stage 1	3,640	(1,767)	(1,873)	–
Transfer to Stage 2	(68)	68	–	–
Transfer to Stage 3	(16)	–	16	–
Net remeasurement of loss allowance	(58,383)	5	4,504	(53,874)
New financial assets originated or purchased	4,880	40	2,066	6,986
Financial assets that have been derecognised	(7,664)	(708)	(9,812)	(18,184)
Balance at 31 December	11,249	136	9,837	21,222

25. OTHER ASSETS, CONTINUED

Analysis of allowance for expected credit losses, continued

'000 KZT	2020			
	Stage 1	Stage 2	Stage 3	Total
Claims for repurchased loans				
Balance at 1 January	710,711	3,340	8,729	722,780
Transfer to Stage 2	(2,299)	2,299	–	–
Transfer to Stage 3	(274)	–	274	–
Net remeasurement of loss allowance	(719,848)	(4,214)	(1,169)	(725,231)
New financial assets originated or purchased	37,084	1,073	7,102	45,259
Other	43,486	–	–	43,486
Balance at 31 December	68,860	2,498	14,936	86,294

Movement in the impairment allowance for expected credit losses on other financial assets for 2021 and 2020 is as follows:

'000 KZT	2021			
	Stage 1	Stage 2	Stage 3	Total
Other financial assets				
Balance at 1 January	209,502	12,229	324,984	546,715
Net remeasurement of loss allowance	167,629	(11,141)	123,802	280,290
Write-offs	(19,275)	–	–	(19,275)
Balance at 31 December	357,856	1,088	448,786	807,730

'000 KZT	2020			
	Stage 1	Stage 2	Stage 3	Total
Other financial assets				
Balance at 1 January	212,688	–	4,997	217,685
Net remeasurement of loss allowance	2,637	12,229	319,987	334,853
Write-offs	(5,823)	–	–	(5,823)
Balance at 31 December	209,502	12,229	324,984	546,715

25. OTHER ASSETS, CONTINUED

Credit quality analysis

The following table sets out information about the credit quality of other financial assets measured at amortised cost for 2021 and 2020:

'000 KZT	2021			
	Stage 1	Stage 2	Stage 3	Total
Other financial assets				
Not overdue	829,485,067	–	–	829,485,067
Overdue 31-90 days	–	18,175	–	18,175
Overdue 91-180 days	–	–	15,893	15,893
Overdue 181-360 days	–	–	543,801	543,801
Gross carrying amount	829,485,067	18,175	559,694	830,062,936
Loss allowance	(369,105)	(1,224)	(458,623)	(828,952)
Carrying amount	829,115,962	16,951	101,071	829,233,984

'000 KZT	2020			
	Stage 1	Stage 2	Stage 3	Total
Other financial assets				
Not overdue	973,430,018	–	–	973,430,018
Overdue 31-90 days	–	38,825	–	38,825
Overdue 91-180 days	–	–	161,418	161,418
Overdue 181-360 days	–	–	220,432	220,432
Gross carrying amount	973,430,018	38,825	381,850	973,850,693
Loss allowance	(278,363)	(14,726)	(339,920)	(633,009)
Carrying amount	973,151,655	24,099	41,930	973,217,684

26. CURRENCY IN CIRCULATION

	2021 '000 KZT	2020 '000 KZT
Banknotes and coins in circulation	3,453,582,980	3,252,242,640
Less banknotes and coins on hand	(1,362,862)	(1,374,161)
	3,452,220,118	3,250,868,479

27. DEPOSITS AND BALANCES FROM BANKS AND OTHER FINANCIAL INSTITUTIONS

	2021 '000 KZT	2020 '000 KZT
Deposits and balances from foreign banks and other financial institutions		
Current accounts of international financial organisations	580,310,854	582,114,441
OECD based banks	2,156,666	907,483
Other foreign banks	3,767,767	1,472,363
Total deposits and balances from foreign banks and other financial institutions	586,235,287	584,494,287
Deposits and balances from Kazakhstan banks and other financial institutions		
Loro accounts		
Kazakhstan 10 top banks*	1,558,315,077	1,378,388,716
Other Kazakhstan banks and financial institutions	705,385,374	581,552,657
Deposits		
Kazakhstan 10 top banks*	3,410,208,174	3,121,368,484
Other Kazakhstan banks and financial institutions	937,270,631	1,662,611,740
Total deposits and balances from Kazakhstan banks	6,611,179,256	6,743,921,597
Total deposits and balances from banks and other financial institutions	7,197,414,543	7,328,415,884

* based on total assets as at 31 December 2021.

As at 31 December 2021 the National Bank has five counterparties (31 December 2020: five counterparties), whose balances exceed 10% of equity. The gross value of these balances as at 31 December 2021 is KZT 4,126,961,332 thousand (31 December 2020: KZT 4,175,833,677 thousand).

As at 31 December 2021 the current accounts of international financial organisations include the membership quota of the Republic of Kazakhstan in the International Monetary Fund (the "IMF") in the amount of KZT 580,302,377 thousand (31 December 2020: KZT 582,107,599 thousand). A membership quota expressed in Special Drawing Rights ("SDRs") is assigned to each member of the IMF. The NBK issued promissory notes to the IMF in the amount of the quota (SDR 960,225 thousand).

28. REPURCHASE AGREEMENTS

In December 2021, the National Bank concluded repurchase agreements in the auto repo market of KASE JSC in the amount of KZT 150,097,813 thousand (31 December 2020: KZT 100,597,147 thousand).

As at 31 December 2021, the fair value of financial assets collateralising repurchase agreements is KZT 140,891,608 thousand (31 December 2020: KZT 94,346,826 thousand).

29. CURRENT ACCOUNTS OF THE NATIONAL FUND OF THE REPUBLIC OF KAZAKHSTAN

As at 31 December 2021 current accounts of the National Fund of the Republic of Kazakhstan (the "National Fund") amounted to KZT 1,062,130,685 thousand (31 December 2020: KZT 441,555,267 thousand).

During 2021 and 2020 the National Bank performed the trust management activities over the assets of the National Fund. Assets and liabilities of the National Fund are not included in these consolidated financial statements, except for current accounts of the National Fund in NBK.

30. CURRENT ACCOUNTS OF THE MINISTRY OF FINANCE OF THE REPUBLIC OF KAZAKHSTAN

	2021 '000 KZT	2020 '000 KZT
In national currency	901,426,804	959,663,575
In foreign currency	3,501,215	472,488,663
	904,928,019	1,432,152,238

31. CUSTOMER ACCOUNTS

	2021 '000 KZT	2020 '000 KZT
In national currency	206,753,402	238,954,354
In foreign currency	178,720	92,659
	206,932,122	239,047,013

During 2021 and 2020 the National Bank maintained customer accounts in foreign and national currencies. NBK customers' industry is state management, and industries, in which the customers of the NBK's subsidiaries are operating are financial agency services, insurance and liquidation of banks.

As at 31 December 2021 customer accounts did not include customers with a balance exceeding 2% of equity (31 December 2020: no customers).

32. DEBT SECURITIES ISSUED

As at 31 December 2021 debt securities issued comprise the following issues:

Issues	Carrying amount	Date of issue	Date of maturity	Effective interest rate
KZW100012977	104,052,707	23/07/2021	21/01/2022	9.18
KZW100013033	103,423,789	20/08/2021	18/02/2022	9.44
KZW100013108	102,542,141	24/09/2021	25/03/2022	9.59
KZW100013132	216,562,125	15/10/2021	14/01/2022	9.59
KZW100013157	49,647,133	22/10/2021	22/04/2022	9.70
KZW100013181	225,881,870	05/11/2021	04/02/2022	9.81
KZW100013215	101,117,431	19/11/2021	20/05/2022	9.84
KZW100013249	301,605,042	08/12/2021	05/01/2022	9.68
KZW100013256	234,076,090	10/12/2021	11/03/2022	9.80
KZW100013264	223,687,108	15/12/2021	12/01/2022	9.73
KZW100013272	175,309,131	22/12/2021	19/01/2022	9.75
KZW100013280	55,307,227	24/12/2021	24/06/2022	9.96
KZW100013298	217,698,645	29/12/2021	26/01/2022	9.74
	2,110,910,439			

32. DEBT SECURITIES ISSUED, CONTINUED

Issues	Carrying amount	Date of issue	Date of maturity	Effective interest rate
KZ2C00006336	5,170,027	26/12/2019	26/12/2022	10.79
KZ2C00006336	16,122,416	26/12/2019	26/12/2022	10.75
KZ2C00006336	8,135,514	26/12/2019	26/12/2022	10.75
KZ2C00006484	14,849,338	27/02/2020	27/02/2023	10.75
KZ2C00006484	6,497,161	27/02/2020	27/02/2023	10.75
KZ2C00006484	15,216,324	27/02/2020	27/02/2023	11.48
KZ2C00006484	2,079,609	27/02/2020	27/02/2023	11.55
KZ2C00006484	6,900,896	27/02/2020	27/02/2023	11.45
KZ2C00006484	7,288,542	27/02/2020	27/02/2023	11.43
KZ2C00006484	5,207,706	27/02/2020	27/02/2023	11.37
KZ2C00006484	2,083,751	27/02/2020	27/02/2023	11.35
KZ2C00006484	6,253,416	27/02/2020	27/02/2023	11.32
KZ2C00006484	5,211,522	27/02/2020	27/02/2023	11.29
KZ2C00006484	5,211,552	27/02/2020	27/02/2023	11.30
KZ2C00006484	3,134,278	27/02/2020	27/02/2023	11.06
KZ2C00006484	6,268,390	27/02/2020	27/02/2023	11.06
KZ2C00006484	5,224,749	27/02/2020	27/02/2023	11.03
KZ2C00006484	10,448,950	27/02/2020	27/02/2023	11.05
KZ2C00006484	2,478,186	27/02/2020	27/02/2023	10.99
KZ2C00006476	4,910,376	10/04/2020	10/04/2025	11.52
KZ2C00006476	6,396,369	10/04/2020	10/04/2025	11.44
KZ2C00006476	2,955,548	10/04/2020	10/04/2025	11.39
KZ2C00006476	4,926,655	10/04/2020	10/04/2025	11.37
KZ2C00006476	2,958,583	10/04/2020	10/04/2025	11.35
KZ2C00006476	2,959,840	10/04/2020	10/04/2025	11.33
KZ2C00006476	4,934,685	10/04/2020	10/04/2025	11.32
KZ2C00006476	494,923	10/04/2020	10/04/2025	11.20
KZ2C00006476	4,950,900	10/04/2020	10/04/2025	11.19
KZ2C00006476	2,978,639	10/04/2020	10/04/2025	11.12
KZ2C00006476	10,917,815	10/04/2020	10/04/2025	11.10
KZ2C00006948	7,072,033	04/09/2020	04/09/2022	10.93
KZ2C00006948	7,071,499	04/09/2020	04/09/2022	10.97
KZ2C00006948	5,050,972	04/09/2020	04/09/2022	10.97
KZ2C00006948	5,050,913	04/09/2020	04/09/2022	10.97
KZ2C00006948	6,766,169	04/09/2020	04/09/2022	10.98
KZ2C00006948	3,030,597	04/09/2020	04/09/2022	10.97
KZ2C00006948	10,102,953	04/09/2020	04/09/2022	10.95
KZ2C00006948	6,366,747	04/09/2020	04/09/2022	10.96
KZ2C00006955	6,612,435	11/09/2020	11/09/2025	11.17



32. DEBT SECURITIES ISSUED, CONTINUED

Issues	Carrying amount	Date of issue	Date of maturity	Effective interest rate
KZ2C00006955	6,610,791	11/09/2020	11/09/2025	11.29
KZ2C00006955	15,125,278	11/09/2020	11/09/2025	11.25
KZ2C00006906	204,714,712	21/10/2020	21/10/2032	11.92
KZ2C00007037	13,026,381	06/11/2020	06/11/2022	10.95
KZ2C00007037	15,030,734	06/11/2020	06/11/2022	10.94
KZ2C00007037	15,034,032	06/11/2020	06/11/2022	10.92
KZ2C00007037	12,030,490	06/11/2020	06/11/2022	10.89
KZ2C00007037	5,515,096	06/11/2020	06/11/2022	10.85
KZ2C00007037	4,522,392	06/11/2020	06/11/2022	10.57
KZ2C00007136	9,221,754	20/11/2020	20/11/2030	11.11
KZ2C00007110	4,792,238	11/12/2020	11/12/2025	11.10
KZ2C00007110	9,597,787	11/12/2020	11/12/2025	10.99
KZ2C00007110	9,220,878	11/12/2020	11/12/2025	10.71
KZ2C00007128	14,086,461	14/12/2020	14/12/2027	11.05
KZ2C00007318	42,066,892	22/01/2021	22/01/2026	10.70
KZ2C00007318	10,540,889	22/01/2021	22/01/2026	10.60
KZ2C00007300	10,724,701	29/01/2021	29/01/2024	10.33
KZ2C00007300	5,367,971	29/01/2021	29/01/2024	10.26
KZ2C00007300	10,748,952	29/01/2021	29/01/2024	10.19
KZ2C00007300	10,765,646	29/01/2021	29/01/2024	10.10
KZ2C00007326	31,173,225	12/02/2021	12/02/2028	10.53
KZ2C00007326	20,867,252	12/02/2021	12/02/2028	10.42
KZ2C00007334	15,328,722	05/03/2021	05/03/2031	10.47
KZ2C00007458	10,506,453	04/06/2021	14/06/2022	9.90
KZ2C00007573	10,373,159	18/06/2021	18/06/2024	10.10
KZ2C00007516	10,432,001	18/06/2021	18/06/2023	10.01
KZ2C00007466	10,449,228	25/06/2021	05/07/2022	9.90
KZ2C00007474	7,834,516	02/07/2021	12/07/2022	9.85
KZ2C00007474	2,597,900	02/07/2021	12/07/2022	9.84
KZ2C00007581	10,326,035	02/07/2021	02/07/2024	10.14
KZ2C00007482	10,397,077	16/07/2021	26/07/2022	9.81
KZ2C00007490	10,335,333	06/08/2021	16/08/2022	9.95
KZ2C00007508	5,693,690	13/08/2021	23/08/2022	9.98
KZ2C00007508	4,621,080	13/08/2021	23/08/2022	9.98
KZ2C00008050	3,073,234	10/09/2021	10/09/2022	9.96
KZ2C00008050	17,415,204	10/09/2021	10/09/2022	9.96
KZ2C00008050	10,234,170	10/09/2021	10/09/2022	10.11
KZ2C00008043	10,177,615	01/10/2021	01/10/2022	10.12

32. DEBT SECURITIES ISSUED, CONTINUED

Issues	Carrying amount	Date of issue	Date of maturity	Effective interest rate
KZ2C00008043	10,178,594	01/10/2021	01/10/2022	10.10
KZ2C00008043	10,179,938	01/10/2021	01/10/2022	10.09
KZ2C00008035	10,072,237	05/11/2021	05/11/2022	10.32
KZ2C00008035	10,074,268	05/11/2021	05/11/2022	10.29
KZ2C00008035	10,076,519	05/11/2021	05/11/2022	10.26
KZ2C00008027	4,625,772	03/12/2021	03/12/2022	10.28
KZ2C00008027	5,370,198	03/12/2021	03/12/2022	10.41
KZ2C00008027	9,981,958	03/12/2021	03/12/2022	10.51
KZ2C00008027	9,987,322	03/12/2021	03/12/2022	10.45
	951,417,753			
	3,062,328,192			

As at 31 December 2020 debt securities issued comprise the following issues:

Issues	Carrying amount	Date of issue	Date of maturity	Effective interest rate
KZW100011771	285,288,716	17/01/2020	15/01/2021	10.14
KZW100011839	82,724,937	07/02/2020	05/02/2021	10.14
KZW100011938	35,468,108	20/03/2020	19/03/2021	12.00
KZW100011979	77,275,949	03/04/2020	02/04/2021	12.00
KZW100012076	166,899,832	15/05/2020	14/05/2021	10.72
KZW100012159	91,072,177	19/06/2020	18/06/2021	10.69
KZW100012225	95,454,285	24/07/2020	22/01/2021	9.99
KZW100012290	162,761,170	21/08/2020	19/02/2021	9.90
KZW100012365	124,133,965	25/09/2020	26/03/2021	9.93
KZW100012407	127,712,618	16/10/2020	15/01/2021	9.54
KZW100012423	101,836,444	23/10/2020	23/04/2021	9.87
KZW100012456	211,906,764	06/11/2020	05/02/2021	9.53
KZW100012480	101,086,656	20/11/2020	21/05/2021	9.81
KZW100012514	215,947,708	09/12/2020	06/01/2021	9.02
KZW100012522	323,784,296	11/12/2020	12/03/2021	9.50
KZW100012530	231,815,382	15/12/2020	13/01/2021	9.01
KZW100012548	196,249,836	23/12/2020	20/01/2021	9.02
KZW100012555	100,178,326	25/12/2020	25/06/2021	9.74
KZW100012563	185,895,963	30/12/2020	27/01/2021	9.01
	2,917,493,132			



32. DEBT SECURITIES ISSUED, CONTINUED

Issues	Carrying amount	Date of issue	Date of maturity	Effective interest rate
KZ2C00006211	8,219,741	26/09/2019	26/09/2021	10.33
KZ2C00006211	2,518,078	26/09/2019	26/09/2021	10.49
KZ2C00006211	15,063,861	26/09/2019	26/09/2021	10.92
KZ2C00006211	23,081,892	26/09/2019	26/09/2021	11.02
KZ2C00006211	21,424,716	26/09/2019	26/09/2021	11.02
KZ2C00006328	19,812,181	15/11/2019	15/11/2021	10.92
KZ2C00006328	9,736,786	15/11/2019	15/11/2021	10.91
KZ2C00006328	19,491,945	15/11/2019	15/11/2021	10.91
KZ2C00006328	11,992,408	15/11/2019	15/11/2021	10.89
KZ2C00006328	990,832	15/11/2019	15/11/2021	10.90
KZ2C00006328	3,964,539	15/11/2019	15/11/2021	10.86
KZ2C00006328	6,940,286	15/11/2019	15/11/2021	10.81
KZ2C00006328	19,828,519	15/11/2019	15/11/2021	10.82
KZ2C00006328	6,340,602	15/11/2019	15/11/2021	10.81
KZ2C00006336	1,357,026	26/12/2019	26/12/2022	10.81
KZ2C00006336	3,714,866	26/12/2019	26/12/2022	10.78
KZ2C00006336	15,821,422	26/12/2019	26/12/2022	10.75
KZ2C00006336	7,983,571	26/12/2019	26/12/2022	10.75
KZ2C00006484	14,593,063	27/02/2020	27/02/2023	10.75
KZ2C00006484	6,385,323	27/02/2020	27/02/2023	10.75
KZ2C00006484	14,869,075	27/02/2020	27/02/2023	11.48
KZ2C00006484	2,031,380	27/02/2020	27/02/2023	11.55
KZ2C00006484	6,745,812	27/02/2020	27/02/2023	11.45
KZ2C00006484	7,127,103	27/02/2020	27/02/2023	11.43
KZ2C00006484	5,093,587	27/02/2020	27/02/2023	11.37
KZ2C00006484	2,038,601	27/02/2020	27/02/2023	11.35
KZ2C00006484	6,119,578	27/02/2020	27/02/2023	11.32
KZ2C00006484	5,100,246	27/02/2020	27/02/2023	11.29
KZ2C00006484	5,100,298	27/02/2020	27/02/2023	11.30
KZ2C00006484	3,073,017	27/02/2020	27/02/2023	11.06
KZ2C00006484	6,145,742	27/02/2020	27/02/2023	11.06
KZ2C00006484	5,123,359	27/02/2020	27/02/2023	11.03
KZ2C00006484	10,245,760	27/02/2020	27/02/2023	11.04
KZ2C00006484	2,429,962	27/02/2020	27/02/2023	11.01
KZ2C00006476	4,815,750	10/04/2020	10/04/2025	11.52
KZ2C00006476	6,276,252	10/04/2020	10/04/2025	11.44

32. DEBT SECURITIES ISSUED, CONTINUED

Issues	Carrying amount	Date of issue	Date of maturity	Effective interest rate
KZ2C00006476	2,900,872	10/04/2020	10/04/2025	11.39
KZ2C00006476	4,835,696	10/04/2020	10/04/2025	11.37
KZ2C00006476	2,904,594	10/04/2020	10/04/2025	11.35
KZ2C00006476	2,906,135	10/04/2020	10/04/2025	11.33
KZ2C00006476	4,845,543	10/04/2020	10/04/2025	11.32
KZ2C00006476	486,339	10/04/2020	10/04/2025	11.20
KZ2C00006476	4,865,443	10/04/2020	10/04/2025	11.19
KZ2C00006476	2,929,216	10/04/2020	10/04/2025	11.12
KZ2C00006476	10,735,708	10/04/2020	10/04/2025	11.10
KZ2C00006948	6,935,912	04/09/2020	04/09/2022	10.93
KZ2C00006948	6,934,711	04/09/2020	04/09/2022	10.97
KZ2C00006948	4,953,144	04/09/2020	04/09/2022	10.97
KZ2C00006948	4,953,012	04/09/2020	04/09/2022	10.97
KZ2C00006948	6,634,980	04/09/2020	04/09/2022	10.98
KZ2C00006948	2,971,919	04/09/2020	04/09/2022	10.97
KZ2C00006948	9,908,551	04/09/2020	04/09/2022	10.95
KZ2C00006948	6,244,068	04/09/2020	04/09/2022	10.96
KZ2C00006955	6,494,639	11/09/2020	11/09/2025	11.17
KZ2C00006955	6,492,668	11/09/2020	11/09/2025	11.29
KZ2C00006955	14,858,194	11/09/2020	11/09/2025	11.25
KZ2C00006906	204,726,300	21/10/2020	21/10/2032	11.92
KZ2C00007037	12,879,550	06/11/2020	06/11/2022	10.95
KZ2C00007037	14,861,614	06/11/2020	06/11/2022	10.94
KZ2C00007037	14,868,285	06/11/2020	06/11/2022	10.92
KZ2C00007037	11,901,233	06/11/2020	06/11/2022	10.89
KZ2C00007037	5,457,001	06/11/2020	06/11/2022	10.85
KZ2C00007136	9,164,899	20/11/2020	20/11/2030	11.11
KZ2C00007110	4,746,947	11/12/2020	11/12/2025	11.01
KZ2C00007110	9,509,698	11/12/2020	11/12/2025	10.98
KZ2C00007128	13,974,175	14/12/2020	14/12/2027	11.05
	728,478,225			
	3,645,971,357			



32. DEBT SECURITIES ISSUED, CONTINUED

Reconciliation of change in the debt securities issued and cash flows from financing activities

In 2021 and 2020 the change in the debt securities issued is as follows:

	2021 '000 KZT
Balance at the beginning of the year	3,645,971,357
Notes issued, paid by cash	22,660,504,762
Nominal cost repaid	(23,212,157,298)
Total changes in cash flows from financing activities	(551,652,536)
Interest accrued	384,754,150
Interest paid	(416,744,779)
Balance at the end of the year	3,062,328,192

	2020 '000 KZT
Balance at the beginning of the year	3,618,820,899
Notes issued, paid by cash	14,795,265,568
Nominal cost repaid	(14,783,505,350)
Total changes in cash flows from financing activities	11,760,218
Other changes	
Interest accrued	350,095,044
Interest paid	(334,704,804)
Balance at the end of the year	3,645,971,357

33. ESTIMATED LIABILITIES

Provision for guaranteeing deposits is recognised in equity in the consolidated statement of financial position of the National Bank as "Special guarantee reserve" and amounts to KZT 685,322,567 thousand (31 December 2020: KZT 598,376,004 thousand) (Note 35).

Provision to cover guarantees related to payment of the guaranteed compensation was recognised within liabilities in the consolidated statement of financial position of the National Bank as "Estimated liabilities" and amounted to KZT 61,130,493 thousand (31 December 2020: KZT 53,056,189 thousand).

The table below shows analysis of movement in the provision for guarantees for the years ended 31 December 2021 and 31 December 2020:

	2021 '000 KZT	2020 '000 KZT
Provision for guarantees at 1 January	53,056,189	33,162,428
<i>Changes affecting contributions to provision for estimated liabilities</i>		
Change in risk parameters	15,575,772	14,197,985
Occurrence of default event (transfer from stage 2 to stage 3)	–	17,360,768
Significant increase in credit risk (transfer from stage 1 to stage 2)	–	418,280
Change in the amount of guaranteed compensation on deposits	6,830,633	5,671,895
Total expenses stated in profit or loss for the year	22,406,405	37,648,928
Transfer to liabilities to depositors due to liquidation	(14,332,101)	(17,755,167)
Provision for guarantees at 31 December	61,130,493	53,056,189

33. ESTIMATED LIABILITIES, CONTINUED

Guarantee reserve movement

The change in the guarantee reserve for 2021 and 2020 is presented as follows:

'000 KZT	2021			
	Stage 1	Stage 2	Stage 3	Total
Guarantee reserve				
Balance at 1 January	53,056,189	–	–	53,056,189
- Transfer to Stage 3	(14,332,101)	–	14,332,101	–
Net change in reserve	22,406,405	–	–	22,406,405
Payment of guaranteed compensation due to the liquidation	–	–	(14,332,101)	(14,332,101)
Balance at 31 December	61,130,493	–	–	61,130,493

'000 KZT	2020			
	Stage 1	Stage 2	Stage 3	Total
Guarantee reserve				
Balance at 1 January	27,991,973	5,170,455	–	33,162,428
- Transfer to Stage 2	(418,280)	418,280	–	–
- Transfer to Stage 3	–	(17,360,768)	17,360,768	–
Net change in reserve	25,482,496	11,772,033	394,399	37,648,928
Payment of guaranteed compensation due to the liquidation	–	–	(17,755,167)	(17,755,167)
Balance at 31 December	53,056,189	–	–	53,056,189

In 2021 payments of guarantee compensation to depositors of these banks due to their liquidation were made at the expense of previously created reserves and expenses of the current period. The amount of liabilities for these banks amounted to KZT 14,332,101 thousand (2020: KZT 17,755,167 thousand).

A guaranteed compensation is a total amount of money paid to a depositor in case of forced liquidation of a participating bank. According to the Law of the Republic of Kazakhstan "On the obligatory guarantee of deposits placed in the second-tier banks of the Republic of Kazakhstan", a depositor shall receive a guarantee compensation in the amount equal to deposit(s) balances without accrued interest and not exceeding the amount of maximum state guarantee per each depositor for each bank separately. Maximum state guarantee amount per each depositor shall be:

- ▶ up to 15 million KZT on savings deposits in national currency;
- ▶ up to 10 million KZT on non-term and term deposits, demand deposits, current accounts and payment cards in national currency;
- ▶ up to 5 million KZT on deposits and accounts in foreign currency.

The National Bank calculates a reserve for expected credit losses on payment of guaranteed compensation to depositors in case of forced liquidation of participating banks, taking into account their probability of default and portion of funds not subject to be recovered in the course of bank liquidation, according to the Methods of Calculation of Reserves for Guarantees related to payment of guaranteed compensation. The probability of bank's default is determined in accordance with a risk-classification group, which in turn shows extent of bank's exposure to risk. A risk-classification group is determined based on analysis of capital adequacy, assets quality, return on assets and liquidity. Portion of funds not subject to be recovered in the course of bank liquidation is determined according to the history of guaranteed compensation payments to depositors and recovery of paid funds in the course of forced liquidation of a participating bank.

The following components have a significant impact on estimated reserve for expected credit losses: determination of probability of default, significant increase in credit risk, exposure at default and loss given default, as well as macroeconomic scenarios model.

34. OTHER LIABILITIES

	2021 '000 KZT	2020 '000 KZT
Other creditors on non-banking activity	17,257,189	20,182,833
Other creditors on banking activity	3,975,566	4,317,017
Total other financial liabilities	21,232,755	24,499,850
Salaries payable	8,025,073	7,293,138
Tax payable (except for corporate income tax)	1,518,907	1,326,586
Payables on purchase of property and equipment	458,730	297,381
Other prepayments received	234,101	416,645
Total other non-financial liabilities	10,236,811	9,333,750
Total other liabilities	31,469,566	33,833,600

As at 31 December 2021 other creditors on non-banking activity comprise obligations to pay for the purchase of gold from counterparties in the amount of KZT 11,602,915 thousand, which were settled in January 2022 (31 December 2020: KZT 15,442,141 thousand), and lease liability in the amount of KZT 1,467,064 thousand (31 December 2020: KZT 2,049,494 thousand).

In 2021 KDIF JSC recognised liabilities on payment of guaranteed compensation to the depositors of the banks being liquidated. The amount of liabilities thereon was KZT 14,332,101 thousand (2020: KZT 17,755,167 thousand). The payment of guaranteed compensation was made through the agent bank. As at 31 December 2021 the remaining portion of the liability on payment of guaranteed compensation is KZT 2,319,379 thousand (31 December 2020: KZT 2,255,315 thousand).

35. CHARTER CAPITAL

Charter capital

The charter capital of the National Bank is regulated by the Edict of the President of the Republic of Kazakhstan dated 30 March 1995 with subsequent amendments. The charter capital of the NBK is owned by the state and is formed in the amount of not less than KZT 20,000,000 thousand.

As at 31 December 2021 and 31 December 2020 the NBK charter capital was KZT 20,000,000 thousand.

Dividends and reserve capital

In accordance with the Law of the Republic of Kazakhstan "On the National Bank of the Republic of Kazakhstan", the NBK should form a capital reserve in the amount of not less than its charter capital. Reserve capital increased at the expenses of the net retained earnings and assigned exclusively to compensate and reimburse losses incurred on the conducted operations in accordance with the requirements set by the Management Board of the National Bank of Kazakhstan. As at 31 December 2021, the capital reserve was nil (31 December 2020: nil).

35. CHARTER CAPITAL, CONTINUED

Special guarantee reserve

According to the Law of the Republic of Kazakhstan “On the Obligatory Guaranteeing of Deposits Placed with the Second-Tier Banks of the Republic of Kazakhstan”, to perform activity related to payment of guaranteed compensation, KDIF JSC establishes a special guarantee reserve formed at the expense of KDIF JSC within 70% of its charter capital, contributions of the participating banks, penalty imposed on participating banks for failure to perform and improper performance of obligations under an adhesion contract, cash received as a result of fulfilment by a forcibly liquidated participating bank of the requirements of KDIF JSC related to the amounts of guaranteed compensation, as well as allocation of profit according to the decision of the NBK. A special guarantee reserve is established to pay a guaranteed compensation to the depositors in case of forced liquidation of a participating bank.

According to the Law of the Republic of Kazakhstan “On the Obligatory Guaranteeing of Deposits Placed with the Second-Tier Banks of the Republic of Kazakhstan”, a target amount of a special reserve of an organisation that perform the obligatory guaranteeing of deposits, to be not less than 5% of the amount of all guaranteed deposits in the participating banks.

An actual amount of a special guarantee reserve net of 70% of charter capital as at 31 December 2021 and 2020 is KZT 685,322,567 thousand or 5.1% and KZT 598,376,004 thousand or 5.5% of gross amount of guaranteed deposits in participating banks, respectively.

	2021 '000 KZT	2020 '000 KZT
Calendar contributions of banks participating in the deposit guarantee system	266,233,547	256,051,123
Amount of compensation made by a liquidation commission of a forcibly liquidated bank	49,827,474	25,582,193
Fines and penalties paid by banks participating in the deposit guarantee system	61,515	61,024
Formation of reserve out of own funds in accordance with the Law	55,600,000	55,600,000
Retained earnings allocated for formation of special guarantee reserve	313,600,031	261,081,664
Special guarantee reserve	685,322,567	598,376,004

Capital management

Retained earnings are transferred to the charter and/or reserve capital in the amount determined by the Management Board of the NBK. After the approval of the annual report of the National Bank by the President of the Republic of Kazakhstan the remaining part of the retained earnings is transferred to the State budget with a deferral of one financial year.

If a reserve capital amount is less than the charter capital amount, the entire net retained earnings remain at the National Bank's disposal and is transferred to the reserve capital until the later reaches the level of the charter capital.

36. ANALYSIS BY SEGMENT

The National Bank's operations comprise a single operating segment for the purposes of these consolidated financial statements in accordance with IFRS 8 Operating Segments. The National Bank is not required to report revenue and expenses by reference to the functions carried out by the National Bank, these activities do not constitute separate operating segments for the purposes of these consolidated financial statements.

37. RISK MANAGEMENT

Risk management policies and procedures

Risk management is fundamental to the National Bank's activities and is an essential element of the National Bank operations. The major risks faced by the National Bank are those related to market risk, credit risk and liquidity risk.

The National Bank's risk management policies aim to identify, analyse and manage the risks faced by the National Bank during its operations, to set appropriate risk limits and controls, and to continuously monitor risk levels and adherence to established limits. Risk management policies and procedures are reviewed regularly to reflect changes in market conditions, products and services offered and emerging best practice.

The management has overall responsibility for the oversight of the risk management framework, overseeing the management of key risks and reviewing its risk management policies and procedures as well as approving significantly large investment exposures.

The Management Board, Board of Directors, committees, commissions and related working groups review regularly matters related to the monetary and investment policies of the National Bank and set up limits on the scope of management over its assets and customers' assets, as well as requirements for the credit assessment of the National Bank's counterparties.

In accordance with Investment Strategy on gold and foreign currency assets management of the NBK approved by the Resolution of the Management Board of the NBK on 17 June 2015 No. 112 (the "GFCA Investment Strategy"), the main goals of risk management are maintenance of liquidity and safety of the National Bank's assets, and profitability growth in the medium and long-term perspective.

In accordance with the fulfilment of goals and functions of National Bank, gold and foreign currency assets of the NBK are separated into the following portfolios: liquidity portfolio, investment portfolio, strategic portfolio, gold portfolio, developing market portfolio and portfolio of alternative investments.

In accordance with GFCA Investment Strategy subsidiary NIC NBK JSC manages the portfolio of alternative instruments.

In accordance with GFCA Investment Strategy and Investment Strategy for Management of Portfolio of Alternative Investments of GFCA of the National Bank approved by the Resolution of the Management Board of the National Bank dated 28 May 2018 No.100, and in accordance with the terms and conditions of the Trust Investment Management Agreement No. 122NB/10 dated 29 March 2013 which was concluded between the NBK and NIC NBK JSC, NIC NBK JSC invests a part of the gold and foreign currency assets of the National Bank in the alternative classes of assets through the special purpose companies/partnerships.

Market risk

Market risk is the risk that the value or future cash flows of a financial instrument will fluctuate because of changes in market functions and conditions. Market risk comprises currency risk, interest rate risk and other price risks. Market risk arises from open positions in interest rate and equity financial instruments, which are exposed to general and specific market movements and changes in the level of volatility of market prices and foreign currency rates.

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

The objective of market risk management is to manage and control market risk exposures within acceptable parameters, whilst optimising the return on risk.

The National Bank manages its market risk mainly by conducting regular assessment of all open positions and setting open position limits in relation to financial instruments, interest rate maturity and currency positions and stop-loss limits. These are monitored on a regular basis and reviewed and approved by the Management Board.

The National Bank utilises Tracking Error methodology. Tracking Error indicator reflects how actual performance of current portfolio differs from the performance of the benchmark portfolio. The estimated tracking error of the investment portfolio of gold and foreign currency assets including derivatives does not exceed 2 (two) percent per annum as at the last working day of each month.

Tracking Error can be used only when the investor manages a portfolio against the benchmark portfolio.

As at 31 December 2021 the benchmark portfolio for the investment portfolio of gold and foreign currency assets was a composite index of:

- ▶ 62,0% – ICE BofAML 0-3 Year US Treasury Index (G1QA);
- ▶ 12,5% – ICE BofAML 0-3 Year Germany, France, Netherlands, Austria, Luxembourg & Finland Government Index (EBDF);
- ▶ 12,5% – ICE BofAML 0-3 Year UK Gilt Index (GBL0);
- ▶ 8,0% – ICE BofAML 0-3 Year Australia Government Index (GJBT);
- ▶ 5,0% – ICE BofAML 0-3 Year All Maturity Canadian Government Index (GBCJ).

As at 31 December 2020 the benchmark portfolio for the investment portfolio of gold and foreign currency assets was a composite index of:

- ▶ 62,0% – ICE BofAML 0-3 Year US Treasury Index (G1QA);
- ▶ 12,5% – ICE BofAML 0-3 Year Germany, France, Netherlands, Austria, Luxembourg & Finland Government Index (EBDF);
- ▶ 12,5% – ICE BofAML 0-3 Year UK Gilt Index (GBL0);
- ▶ 8,0% – ICE BofAML 0-3 Year Australia Government Index (GJBT);
- ▶ 5,0% – ICE BofAML 0-3 Year All Maturity Canadian Government Index (GBCJ).

Investments in hedge funds, private equity funds and real estate funds bear, primarily, market risk and liquidity risk. In this regard, investments in alternative instruments of such type, including investment funds, are very popular among the long-term institutional investors. Such investors are aimed at obtaining a premium for liquidity risk and risk of short-term fluctuations in the financial markets. Therefore, the thorough choice, due diligence of such funds and investment limits per one manager and per one fund are the mandatory tools to control and optimise these risks. In addition, the investment and operating risks of these funds and their managers are regularly monitored and controlled – on the quarterly and semi-annual basis. To mitigate and diversify the risk of concentration, in addition to the above limits, there applied the requirements to diversify investments by the strategies, vintage (the year of formation of a private equity fund) and geography of investments.

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The National Bank is exposed to the effects of fluctuations in the prevailing levels of market interest rates on its financial position and cash flows. Interest margins may increase as a result of such changes but may also reduce or create losses in the event that unexpected movements occur.

Interest rate gap analysis

Interest rate risk is managed principally through monitoring interest rate gaps. A summary of the interest gap position for major financial instruments is as follows:

'000 KZT	Less than 3 months	3-6 months	6-12 months	1-5 years	More than 5 years	Non-interest bearing	Carrying amount
31 December 2021							
ASSETS							
Cash on hand in foreign currency	–	–	–	–	–	112,430,324	112,430,324
Gold	119,470,707	62,900,607	–	–	–	10,072,587,973	10,254,959,287
Placements and loans with banks and other financial institutions	800,280,131	–	–	245,724,357	1,151,915,179	997,648,355	3,195,568,022
Financial instruments under management at fair value through profit or loss	–	–	–	–	799,764	964,601,580	965,401,344
Reverse repurchase agreements	549,162,352	–	–	–	–	–	549,162,352
Investment securities measured at fair value through other comprehensive income	167,641,009	25,781,227	174,612,660	1,280,647,236	836,300,127	776,432,358	3,261,414,617
Investment securities measured at amortised cost	16,763,820	8,416,263	8,324,866	263,613,151	896,231,388	–	1,193,349,488
Other financial assets	1,205	227	10,449	121,216	811,862,372	17,238,515	829,233,984
	1,653,319,224	97,098,324	182,947,975	1,790,105,960	3,697,108,830	12,940,939,105	20,361,519,418

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

Interest rate risk, continued

Interest rate gap analysis, continued

'000 KZT	Less than 3 months	3-6 months	6-12 months	1-5 years	More than 5 years	Non-interest bearing	Carrying amount
LIABILITIES							
Currency in circulation	–	–	–	–	–	3,452,220,118	3,452,220,118
Deposits and balances from banks and other financial institutions	3,982,398,108	367,213,263	–	–	–	2,847,803,172	7,197,414,543
Financial instruments under management at fair value through profit or loss	–	–	–	–	–	1,816,270	1,816,270
Repurchase agreements	150,097,813	–	–	–	–	–	150,097,813
Current accounts of the National Fund of the Republic of Kazakhstan	–	–	–	–	–	1,062,130,685	1,062,130,685
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	901,426,804	–	–	–	–	3,501,215	904,928,019
Customer accounts	–	–	–	–	–	206,932,122	206,932,122
Debt securities issued	1,904,838,649	216,578,243	318,474,817	327,044,358	295,392,125	–	3,062,328,192
Estimated liabilities	–	–	–	–	–	61,130,493	61,130,493
Other financial liabilities	–	–	–	–	–	21,232,755	21,232,755
	6,938,761,374	583,791,506	318,474,817	327,044,358	295,392,125	7,656,766,830	16,120,231,010
	(5,285,442,150)	(486,693,182)	(135,526,842)	1,463,061,602	3,401,716,705	5,284,172,275	4,241,288,408

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

Interest rate risk, continued

Interest rate gap analysis, continued

'000 KZT	Less than 3 months	3-6 months	6-12 months	1-5 years	More than 5 years	Non-interest bearing	Carrying amount
31 December 2020							
ASSETS							
Cash on hand in foreign currency	–	–	–	–	–	122,879,854	122,879,854
Gold	733,253,739	47,759,093	–	–	–	9,165,256,839	9,946,269,671
Placements and loans with banks and other financial institutions	924,351,914	327,572,266	–	184,080,393	1,149,115,944	2,045,785,044	4,630,905,561
Financial instruments under management at fair value through profit or loss	–	–	–	–	–	633,025,926	633,025,926
Reverse repurchase agreements	20,012,508	–	–	–	–	–	20,012,508
Investment securities measured at fair value through other comprehensive income	59,149,372	77,103,833	253,172,757	1,421,656,807	823,303,652	949,050,636	3,583,437,057
Investment securities measured at amortised cost	14,481,524	28,715,508	124,746,555	184,163,170	769,836,978	–	1,121,943,735
Other financial assets	7,178,171	5,584,837	11,540,436	102,494,980	414,095,121	432,324,139	973,217,684
	1,758,427,228	486,735,537	389,459,748	1,892,395,350	3,156,351,695	13,348,322,438	21,031,691,996

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

Interest rate risk, continued

Interest rate gap analysis, continued

'000 KZT	Less than 3 months	3-6 months	6-12 months	1-5 years	More than 5 years	Non-interest bearing	Carrying amount
LIABILITIES							
Currency in circulation	-	-	-	-	-	3,250,868,479	3,250,868,479
Deposits and balances from banks and other financial institutions	4,426,022,073	231,614,789	126,343,362	-	-	2,544,435,660	7,328,415,884
Financial instruments under management at fair value through profit or loss	-	-	-	-	-	968,165	968,165
Repurchase agreements	100,597,147	-	-	-	-	-	100,597,147
Current accounts of the National Fund of the Republic of Kazakhstan	-	-	-	-	-	441,555,267	441,555,267
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	959,663,575	-	-	-	-	472,488,663	1,432,152,238
Customer accounts	-	-	-	-	-	239,047,013	239,047,013
Debt securities issued	2,279,143,747	638,349,385	169,406,387	331,206,463	227,865,375	-	3,645,971,357
Estimated liabilities	-	-	-	-	-	53,056,189	53,056,189
Other financial liabilities	-	-	-	-	-	24,499,850	24,499,850
	7,765,426,542	869,964,174	295,749,749	331,206,463	227,865,375	7,026,919,286	16,517,131,589
	(6,006,999,314)	(383,228,637)	93,709,999	1,561,188,887	2,928,486,320	6,321,403,152	4,514,560,407

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

Interest rate risk, continued

Average effective interest rates

The table below displays average effective interest rates for interest-bearing financial assets and liabilities as at 31 December 2021 and 2020. These interest rates are an approximation of the yields to maturity of these assets and liabilities.

	2021 KZT'000 Carrying amount	Average Effective interest rate, %	2020 KZT'000 Carrying amount	Average Effective interest rate, %
Interest-bearing assets				
Gold				
Gold deposits with foreign banks	182,371,314	0.06	781,012,832	0.02
Placements and loans with banks and other financial institutions				
Nostro accounts				
- USD	589,289,103	0.05	51,822	0.30
- EUR	179,941,742	0.65	878,093,322	0.64
- Other currencies	25,205,613	0.78	40,004,149	0.91
- RUB	4,661,494	1.37	945,259	2.00
- KRW	428	0.05	456	0.15
- JPY	–	–	3,652,450	0.13
- GBP	–	–	50,487	0.30
Loans and deposits with banks				
- KZT	1,398,821,287	6.03	1,662,322,572	6.00

	2021 KZT'000 Carrying amount	Average effective interest rate, %	2020 KZT'000 Carrying amount	Average effective interest rate, %
Financial instruments under management at fair value through profit or loss				
- USD	799,764	11.00	–	–
Reverse repurchase agreements				
- KZT	549,162,352	10.75	20,012,508	10.00
Investment securities measured at fair value through other comprehensive income				
- USD	1,541,126,474	1.75	1,554,250,824	2.97
- KZT	383,229,528	7.89	547,448,409	8.18
- EUR	299,387,069	0.63	267,131,287	1.62
- GBP	115,245,305	1.18	114,492,558	1.56
- CAD	68,742,118	1.60	65,047,361	2.01
- AUD	57,191,580	3.34	56,186,390	2.78
- JPY	20,060,185	0.30	29,829,592	0.79

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

Interest rate risk, continued

Average effective interest rates, continued

	2021 KZT'000 Carrying amount	Average effective interest rate, %	2020 KZT'000 Carrying amount	Average effective interest rate, %
Investment securities measured at amortised cost				
- KZT	1,089,819,372	8.65	1,026,726,874	7.82
- CNY	103,397,287	2.74	95,086,645	2.71
- USD	132,829	3.20	130,216	3.20
Other assets				
- KZT	811,995,469	9.18	540,893,545	6.22
Interest-bearing liabilities				
Deposits and balances from banks and other financial institutions				
<i>Term deposits</i>				
- USD	2,710,266,756	0.29	2,874,654,006	0.29
- KZT	1,637,212,049	9.33	1,909,326,218	8.56
<i>Loans</i>				
- USD	2,132,566	4.00	–	–
Repurchase agreements				
- KZT	150,097,813	8.75	100,597,147	8.00
Unified Treasury Account				
- KZT	901,426,804	0.25	959,663,575	0.25
Debt securities issued				
- KZT	3,062,328,192	9.71	3,645,971,357	9.73

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

Interest rate risk, continued

Interest rate sensitivity analysis

The management of interest rate risk based on interest rate gap analysis is supplemented by monitoring the sensitivity of financial assets and liabilities. An analysis of sensitivity of profit or loss and equity to changes in interest rate (repricing risk) based on a simplified scenario of a 300 basis point (bp) symmetrical fall or rise in all yield curves and positions of interest-bearing assets and liabilities existing as at 31 December 2021 and 31 December 2020 is as follows:

	2021		2020	
	Profit or loss KZT'000	Equity KZT'000	Profit or loss KZT'000	Equity KZT'000
300 bp parallel rise	(125,222,351)	(125,222,351)	(138,975,275)	(138,975,275)
300 bp parallel fall	125,222,351	125,222,351	138,975,275	138,975,275

An analysis of the sensitivity of equity as a result of changes in the fair value of investment securities at fair value through other comprehensive income due to changes in the interest rates, based on positions existing as at 31 December 2021 and 2020 and a simplified scenario of a 50 bp symmetrical fall or rise in all yield curves, is as follows:

	2021		2020	
	Net profit or loss KZT'000	Equity KZT'000	Net profit or loss KZT'000	Equity KZT'000
50 bp parallel fall	–	45,630,681	–	40,515,904
50 bp parallel rise	–	(48,507,014)	–	(46,919,451)

The above tables demonstrate the effect of a change of value of fixed-income financial instruments in a key assumption for interest rate change, while other assumptions remain unchanged. In effect, a correlation may exist between the factors, for which the assumption is made, and other factors not accounted for in the analysis. It should also be noted that these sensitivities are non-linear because of convexity of the 'price – yield to maturity' curve, and larger or smaller impacts should not be interpolated or extrapolated from these results.

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

Interest rate risk, continued

Interest rate sensitivity analysis, continued

The sensitivity analyses do not take into consideration that the National Bank's assets and liabilities are actively managed. Additionally, the financial position of the National Bank may vary at the time that any actual market movement occurs. For example, the National Bank's financial risk management strategy aims to manage the exposure to market fluctuations. In case of sharp negative fluctuations, management actions could include selling investments, changing investment portfolio allocation and taking other protective action, while maintaining all restrictions and limits provided for by Investment Strategy of Gold and Foreign Exchange Reserves of the National Bank and other safeguards against decrease in assets value. Consequently, a change in the assumptions may not have any actual impact on the liabilities and significant impact on the assets carried at market value in the consolidated statement of financial position. In these circumstances, the different measurement bases for liabilities and assets may lead to volatility in equity.

Currency risk

The National Bank has assets and liabilities denominated in several foreign currencies.

Currency risk is the risk that the fair value or the future cash flows of a financial instrument will fluctuate because of changes in market foreign currency exchange rates. The National Bank does not hedge its exposure to currency risk.

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

Currency risk, continued

The following table shows the National Bank's foreign currency exposure structure of financial assets and liabilities as at 31 December 2021:

KZT'000	KZT	Gold	USD	EUR	JPY	SDR	GBP	Other	Total
ASSETS									
Cash on hand in foreign currency	-	-	111,569,477	733,606	7,661	-	56,474	63,106	112,430,324
Gold	-	10,254,959,287	-	-	-	-	-	-	10,254,959,287
Placements and loans with banks and other financial institutions	1,518,900,509	-	736,641,427	188,799,238	5,270,134	703,780,077	7,201,113	34,975,524	3,195,568,022
Financial instruments under management at fair value through profit or loss	-	-	964,970,661	255,725	-	-	20,534	154,424	965,401,344
Reverse repurchase agreements	549,162,352	-	-	-	-	-	-	-	549,162,352
Investment securities measured at fair value through other comprehensive income	1,133,229,528	-	1,567,558,832	299,387,069	20,060,185	-	115,245,305	125,933,698	3,261,414,617
Investment securities measured at amortised cost	1,089,819,372	-	132,829	-	-	-	-	103,397,287	1,193,349,488
Investments in associates	7,255,451	-	-	-	-	-	-	-	7,255,451
Other financial assets	829,233,984	-	-	-	-	-	-	-	829,233,984
Total assets	5,127,601,196	10,254,959,287	3,380,873,226	489,175,638	25,337,980	703,780,077	122,523,426	264,524,039	20,368,774,869

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

Currency risk, continued

KZT'000	KZT	Gold	USD	EUR	JPY	SDR	GBP	Other	Total
LIABILITIES									
Currency in circulation	3,452,220,118	-	-	-	-	-	-	-	3,452,220,118
Deposits and balances from banks and other financial institutions	2,230,554,506	-	4,106,516,776	271,763,424	4,119,038	580,302,376	3,345,022	813,401	7,197,414,543
Financial instruments under management at fair value through profit or loss	15,743	-	862,079	278,509	117,252	-	64,216	478,471	1,816,270
Repurchase agreements	150,097,813	-	-	-	-	-	-	-	150,097,813
Current accounts of the National Fund of the Republic of Kazakhstan	1,062,130,685	-	-	-	-	-	-	-	1,062,130,685
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	901,426,804	-	261,268	-	-	-	-	3,239,947	904,928,019
Customer accounts	206,753,402	-	90,749	8,734	-	-	7	79,230	206,932,122
Debt securities issued	3,062,328,192	-	-	-	-	-	-	-	3,062,328,192
Estimated liabilities	61,130,493	-	-	-	-	-	-	-	61,130,493
Other financial liabilities	17,715,835	-	3,516,626	294	-	-	-	-	21,232,755
Total liabilities	11,144,373,591	-	4,111,247,498	272,050,961	4,236,290	580,302,376	3,409,245	4,611,049	16,120,231,010
Net position	(6,016,772,395)	10,254,959,287	(730,374,272)	217,124,677	21,101,690	123,477,701	119,114,181	259,912,990	4,248,543,859
The effect of derivatives held for risk management purposes	(19,878,543)	-	(43,941,742)	71,352,839	6,415,845	-	(3,092,715)	(10,855,684)	-
Net position after derivatives held for risk management purposes	(6,036,650,938)	10,254,959,287	(774,316,014)	288,477,516	27,517,535	123,477,701	116,021,466	249,057,306	4,248,543,859

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

Currency risk, continued

The following table shows the foreign currency exposure structure of financial assets and liabilities as at 31 December 2020:

	KZT'000	KZT	Gold	USD	EUR	JPY	SDR	GBP	Other	Total
ASSETS										
Cash on hand in foreign currency	-	-	-	121,562,192	1,204,434	8,356	-	55,657	49,215	122,879,854
Gold	-	-	9,946,269,671	-	-	-	-	-	-	9,946,269,671
Placements and loans with banks and other financial institutions	1,659,159,182	-	-	1,304,724,635	888,914,755	12,020,417	705,899,076	8,045,522	52,141,974	4,630,905,561
Financial instruments under management at fair value through profit or loss	-	-	-	632,741,794	16,041	25,753	-	37,231	205,107	633,025,926
Reverse repurchase agreements	20,012,508	-	-	-	-	-	-	-	-	20,012,508
Investment securities measured at fair value through other comprehensive income	1,297,448,409	-	-	1,701,478,143	313,606,871	33,306,273	-	116,363,610	121,233,751	3,583,437,057
Investment securities measured at amortised cost	1,026,726,874	-	-	130,216	-	-	-	-	95,086,645	1,121,943,735
Investments in associates	5,683,549	-	-	-	-	-	-	-	-	5,683,549
Other financial assets	973,217,684	-	-	-	-	-	-	-	-	973,217,684
Total assets	4,982,248,206	9,946,269,671	3,760,636,980	1,203,742,101	705,899,076	45,360,799	124,502,020	268,716,692	21,037,375,545	

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

Currency risk, continued

KZT'000	KZT	Gold	USD	EUR	JPY	SDR	GBP	Other	Total
LIABILITIES									
Currency in circulation	3,250,868,479	-	-	-	-	-	-	-	3,250,868,479
Deposits and balances from banks and other financial institutions	2,900,520,773	-	3,412,871,716	400,581,450	11,223,679	582,107,600	3,296,698	17,813,968	7,328,415,884
Financial instruments under management at fair value through profit or loss	1,058	-	448,267	259,538	7,055	-	44,506	207,741	968,165
Repurchase agreements	100,597,147	-	-	-	-	-	-	-	100,597,147
Current accounts of the National Fund of the Republic of Kazakhstan	441,555,267	-	-	-	-	-	-	-	441,555,267
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	959,663,575	-	41,530	469,553,327	-	-	-	2,893,806	1,432,152,238
Customer accounts	238,954,354	-	65,647	26,969	-	-	17	26	239,047,013
Debt securities issued	3,645,971,357	-	-	-	-	-	-	-	3,645,971,357
Estimated liabilities	53,056,189	-	-	-	-	-	-	-	53,056,189
Other financial liabilities	21,555,779	-	2,943,864	207	-	-	-	-	24,499,850
Total liabilities	11,612,743,978	-	3,416,371,024	870,421,491	11,230,734	582,107,600	3,341,221	20,915,541	16,517,131,589
Net position	(6,630,495,772)	9,946,269,671	344,265,956	333,320,610	34,130,065	123,791,476	121,160,799	247,801,151	4,520,243,956
The effect of derivatives held for risk management purposes	(1,155,884)	-	17,009,011	(13,816,589)	4,338,039	-	(2,055,627)	(4,318,950)	-
Net position after derivatives held for risk management purposes	(6,631,651,656)	9,946,269,671	361,274,967	319,504,021	38,468,104	123,791,476	119,105,172	243,482,201	4,520,243,956

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

Currency risk, continued

Management of the National Bank believes that, as at 31 December 2021, given the current economic conditions in Kazakhstan, fluctuation of exchange rate by 20% is a realistic movement in KZT exchange rates against the USD. This is the sensitivity rate used in the National Bank when reporting foreign currency risk internally to key management personnel of the National Bank and represents management's assessment of the possible change in foreign currency exchange rates. The sensitivity analysis includes only amounts in foreign currency as of the end of the period and adjusts their translation for appreciation and depreciation in currency rates as at 31 December 2021.

A weakening of the KZT, as indicated below, against the following currencies at 31 December 2021 and 2020, would have increased (decreased) equity by the amounts shown below. This analysis is based on foreign currency exchange rate variances that the National Bank considered to be reasonably possible at the end of the reporting period. The given level of sensitivity is used within the National Bank for preparation of currency risk report for the key management of the National Bank. The analysis assumes that all other variables, in particular interest rates, remain constant.

	Equity KZT'000	Equity KZT'000
	2021	2020
	(+20% / -20%)	(+20% / -20%)
Appreciation of USD against KZT	(154,863,203)	72,254,993
Depreciation of USD against KZT	154,863,203	(72,254,993)
Appreciation of EUR against KZT	57,695,503	63,900,804
Depreciation of EUR against KZT	(57,695,503)	(63,900,804)
Appreciation of a troy ounce of gold against KZT	2,050,991,857	1,989,253,934
Depreciation of a troy ounce of gold against KZT	(2,050,991,857)	(1,989,253,934)
Appreciation of JPY against KZT	5,503,507	7,693,620
Depreciation of JPY against KZT	(5,503,507)	(7,693,620)
Appreciation of GBP against KZT	23,204,293	23,821,035
Depreciation of GBP against KZT	(23,204,293)	(23,821,035)
Appreciation of SDR against KZT	24,695,540	24,758,295
Depreciation of SDR against KZT	(24,695,540)	(24,758,295)
Appreciation of other currencies against KZT	49,811,461	48,696,440
Depreciation of other currencies against KZT	(49,811,461)	(48,696,440)

Limitations of sensitivity analysis

The above tables demonstrate the effect of a change of value of fixed-income financial instruments in a key assumption for change in the KZT exchange rate, while other assumptions remain unchanged. In effect, a correlation may exist between the factors, for which the assumption is made, and other factors not accounted for in the analysis. It should also be noted that these sensitivities are non-linear, and larger or smaller impacts should not be interpolated or extrapolated from these results.

Other limitations of the sensitivity analysis include application of hypothetical movements in the market with the purpose of disclosure of the potential risks, which represent only expectations of the National Bank of the future changes in the market which cannot be predicted with sufficient level of assurance. A further limitation is the assumption that all interest rates change identically.

37. RISK MANAGEMENT, CONTINUED

Market risk, continued

Other price risk

Other price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded in the market. Other price risk arises when the National Bank takes a long or short position in a financial instrument.

An analysis of sensitivity of profit or loss and equity to changes in securities prices based on positions existing as at 31 December 2021 and 2020 and a simplified scenario of a 10% change in all securities prices is as follows:

	2021		2020	
	Profit or loss KZT'000	Equity KZT'000	Profit or loss KZT'000	Equity KZT'000
A 10% increase in securities prices	96,462,316	77,643,236	63,252,523	75,549,603
A 10% decrease in securities prices	(96,462,316)	(77,643,236)	(63,252,523)	(75,549,603)

Credit risk

Credit risk is the risk of financial loss to the National Bank if a borrower, issuer and/or counterparty to a financial instrument fails to meet its contractual obligations. The National Bank has policies and procedures for the management of credit exposures (both for recognised financial assets and unrecognised contractual commitments), including guidelines to limit portfolio concentration and implementing recommendations of the Investment Committee, and the Risk Committee, which are responsible for developing investment decisions. The credit risk management policy is reviewed and approved by the Management Board.

The National Bank's credit risk management policy establishes:

- ▶ A methodology for credit assessment calculation and determination of maximum risk limits on the National Bank's counterparties, clearing brokers and custodians;
- ▶ Procedures for ongoing monitoring and review of the risk limit of the National Bank's counterparties, clearing brokers and custodians.

The Department of Monetary Operations, based on a financial performance and financial position ratios analysis with use of international rating agencies' data, prepares information about new counterparties proposed to be included in the list of approved counterparties of the National Bank. The Investment Committee approves a new counterparty on the basis of this report.

The Department of Monetary Operations of the National Bank exercises daily monitoring of compliance with limits imposed on each individual counterparty, clearing broker and custodian. In addition to individual counterparty analysis, the Department of Monetary Operations monitors compliance of the credit ratings of financial instruments with the established limits.

37. RISK MANAGEMENT, CONTINUED

Credit risk, continued

The maximum exposure to credit risk from financial assets at the reporting date is as follows:

	2021 KZT'000	2020 KZT'000
ASSETS		
Gold	182,371,314	781,012,832
Placements and loans with banks and other financial institutions	3,195,568,022	4,630,905,561
Financial instruments under management at fair value through profit or loss	965,401,344	633,025,926
Reverse repurchase agreements	549,162,352	20,012,508
Investment securities measured at fair value through other comprehensive income	2,484,982,259	2,827,941,031
Investment securities measured at amortised cost	1,193,349,488	1,121,943,735
Other financial assets	829,233,984	973,217,684
Total maximum exposure	9,400,068,763	10,988,059,277

The maximum exposure to credit risk from unrecognised contractual commitments at the reporting date is presented in Note 38.

Offsetting financial assets and financial liabilities

The disclosures set out in the tables below include financial assets and financial liabilities that:

- ▶ are offset in the National Bank's consolidated statement of financial position; or
- ▶ are subject to an enforceable master netting arrangement or similar agreement that covers similar financial instruments, irrespective of whether they are offset in the consolidated statement of financial position.

Similar agreements include derivative clearing agreements, global master repurchase agreements, and global master securities lending agreements. Similar financial instruments include derivatives, sales and repurchase agreements, reverse sale and repurchase agreements, and securities borrowing and lending agreements.

The National Bank's derivative transactions that are not transacted on the exchange are entered into under International Derivative Swaps and Dealers Association (ISDA) Master Netting Agreements. In general, under such agreements the amounts owed by each counterparty that are due on a single day in respect of transactions outstanding in the same currency under the agreement are aggregated into a single net amount payable by one party to the other. In certain circumstances, for example when a credit event such as a default occurs, all outstanding transactions under the agreement are terminated, the termination value is assessed, and only a single net amount is due or payable in settlement transactions.

The National Bank's sale and repurchase, reverse sale and repurchase transactions, and securities borrowings and lendings are covered by global master repurchase agreement (ISMA) or subject to eligibility criteria for Kazakhstan Stock Exchange membership.

37. RISK MANAGEMENT, CONTINUED

Offsetting financial assets and financial liabilities, continued

The above ISDA and similar master netting arrangements do not meet the offsetting criteria in the consolidated statement of financial position. This is because they create a right of set-off of recognised amounts that is enforceable only following an event of default, insolvency or bankruptcy of the National Bank or the counterparties. In addition, the National Bank and its counterparties do not intend to settle on a net basis or to realise the assets and settle the liabilities simultaneously.

The National Bank receives and accepts collateral in the form of marketable securities in respect of the sales and repurchase agreements, reverse sale and repurchase agreements.

37. RISK MANAGEMENT, CONTINUED

Offsetting financial assets and financial liabilities, continued

The table below shows financial assets and financial liabilities subject to an enforceable master netting arrangement or similar arrangements as at 31 December 2021:

KZT'000		Related amounts not offset in the consolidated statement of financial position				Net amount
	Gross amounts of recognised financial asset/liability	Gross amount of recognised financial assets/ liabilities offset in the consolidated statement of financial position	Net amount of financial assets/ liabilities presented in the consolidated statement of financial position	Financial instruments		Cash collateral received
Types of financial assets/ liabilities						
Reverse repurchase agreements	549,162,352	-	549,162,352	(525,082,835)	-	24,079,517
Investment securities measured at fair value through other comprehensive income	140,891,608	-	140,891,608	(140,891,608)	-	-
Total financial assets	690,053,960	-	690,053,960	(665,974,443)	-	24,079,517
Repurchase agreements	(150,097,813)	-	(150,097,813)	140,891,608	-	(9,206,205)
Total financial liabilities	(150,097,813)	-	(150,097,813)	140,891,608	-	(9,206,205)

37. RISK MANAGEMENT, CONTINUED

Offsetting financial assets and financial liabilities, continued

The table below shows financial assets and financial liabilities subject to an enforceable master netting arrangement or similar arrangements as at 31 December 2020:

KZT'000	Gross amounts of recognised financial asset/liability	Gross amount of recognised financial assets/ liabilities offset in the consolidated statement of financial position	Net amount of financial assets/ liabilities presented in the consolidated statement of financial position	Related amounts not offset in the consolidated statement of financial position		Net amount
				Financial instruments	Cash collateral received	
Types of financial assets/liabilities						
Reverse repurchase agreements	20,012,508	-	20,012,508	(19,121,142)	-	891,366
Investment securities measured at fair value through other comprehensive income	94,346,826	-	94,346,826	(94,346,826)	-	-
Total financial assets	114,359,334	-	114,359,334	(113,467,968)	-	891,366
Repurchase agreements	(100,597,147)	-	(100,597,147)	94,346,826	-	(6,250,321)
Total financial liabilities	(100,597,147)	-	(100,597,147)	94,346,826	-	(6,250,321)

37. RISK MANAGEMENT, CONTINUED

Offsetting financial assets and financial liabilities, continued

The gross amounts of financial assets and financial liabilities and their net amounts as presented in the consolidated statement of financial position that are disclosed in the above tables are measured in the consolidated statement of financial position on the following basis:

- assets and liabilities resulting from sale and repurchase agreements, reverse sale and repurchase agreements – amortised cost.

The table below reconciles the net amounts of financial assets and financial liabilities presented in the consolidated statement of financial position, as set out above, to the line items presented in the consolidated statement of financial position as at 31 December 2021.

KZT'000 Types of financial assets/ liabilities	Net amount	Line item in the consolidated statement of financial position	Carrying amount in the consolidated statement of financial position	Financial asset/ liability not in the scope of offsetting disclosure	Note
Reverse repurchase agreements	549,162,352	Reverse repurchase agreements	549,162,352	–	21
Investment securities measured at fair value through other comprehensive income	140,891,608	Investment securities measured at fair value through other comprehensive income	3,261,414,617	3,120,523,009	22
Repurchase agreements	(150,097,813)	Repurchase agreements	(150,097,813)	–	28

The table below reconciles the net amounts of financial assets and financial liabilities presented in the consolidated statement of financial position, as set out above, to the line items presented in the consolidated statement of financial position as at 31 December 2020.

KZT'000 Types of financial assets/ liabilities	Net amount	Line item in the consolidated statement of financial position	Carrying amount in the consolidated statement of financial position	Financial asset/ liability not in the scope of offsetting disclosure	Note
Reverse repurchase agreements	20,012,508	Reverse repurchase agreements	20,012,508	–	21
Investment securities measured at fair value through other comprehensive income	94,346,826	Investment securities measured at fair value through other comprehensive income	3,583,437,057	3,489,090,231	22
Repurchase agreements	(100,597,147)	Repurchase agreements	(100,597,147)	–	28

37. RISK MANAGEMENT, CONTINUED

Liquidity risk

Liquidity risk is the risk that the National Bank will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash. Liquidity risk exists when the maturities of assets and liabilities do not match. The matching and/or controlled mismatching of the maturities and interest rates of assets and liabilities is fundamental to liquidity management. It is unusual for financial institutions ever to be completely matched, since business transacted is often of an uncertain term and of different types. An unmatched position potentially enhances profitability, but can also increase the risk of losses.

The National Bank maintains liquidity management with the objective of ensuring that funds will be available at all times to honour all cash flow obligations as they become due. The liquidity policy is reviewed and approved by the Management Board.

The National Bank seeks to actively support a diversified and stable funding base comprising debt securities in issue, long- and short-term loans from other banks, core corporate and retail customer deposits, accompanied by diversified portfolios of highly liquid assets, in order to be able to respond quickly and efficiently to unforeseen liquidity requirements.

Since the National Bank carries out the issue of national currency, the default risk on fulfilment its obligations in national currency is minimal, and the liquidity risk is more applicable for obligations denominated in foreign currency.

The National Bank's liquidity management policy requires:

- ▶ projecting cash flows by major currencies and considering the level of liquid assets necessary in relation thereto
- ▶ maintaining a diverse range of funding sources
- ▶ maintaining a portfolio of highly marketable assets that can easily be liquidated as protection against any interruption to cash flow (the "liquidity portfolio")
- ▶ maintaining liquidity and funding contingency plans
- ▶ monitoring liquidity ratios against regulatory requirements

The Department of Monetary Operations based on information of the asset and liability liquidity performs analysis of the liquidity position. Afterwards, the Department of Monetary Operations maintains the liquidity level by purchasing highly liquid assets. To meet liquidity management goals the liquidity portfolio is invested in assets that can be sold as soon as it possible if required.

According to the Investment Strategy of Gold and Foreign Exchange Reserves of the National Bank the liquidity portfolio has to comply with the following parameters:

- ▶ duration of the liquidity portfolio should not exceed 1 year;
- ▶ base currency of the liquidity portfolio is USD;
- ▶ volume of liquidity portfolio should not fall below USD 1 billion inclusive of current liabilities with maturities of less than 5 (five) working days;
- ▶ volume of liquidity portfolio should not be less than the volume of payments on state external debt service for the next 6 months. This limitation is checked once in a calendar quarter (on the tenth working day of each quarter).

If the market value of the liquidity portfolio does not comply with the given parameters, it is replenished as soon as practicable, but not later than 1 month of the observance of such non-compliance, or within a different period provided for by the decision of the Investment Committee of the National Bank.

37. RISK MANAGEMENT, CONTINUED

Liquidity risk, continued

The assets of the liquidity portfolio may be invested in cash currency, state (sovereign) debt securities of the countries with the credit rating not lower than A- (Standard & Poor's) and/or A3 (Moody's), agency debt securities, debt securities of international financial institutions with the credit rating not lower than AAA (Standard & Poor's) and/or Aaa (Moody's), regional (municipal) debt securities of the countries with the credit rating not lower than A- (Standard & Poor's) and/or A3 (Moody's), certificates of deposit (CD), commercial papers (CP) with the short-term credit rating not lower than A – 1 (Standard & Poor's) or P-1 (Moody's), deposits, forward transactions in fully convertible currencies with maturity of up to 1 month as part of hedging of foreign currency liabilities. The maximum term for the deposit should not exceed one month.

The assets of the liquidity portfolio are invested in freely convertible currencies, in the national currency of the People's Republic of China, as well as in the currencies of the countries of the Eurasian Economic Union.

If the volume of assets in liquidity portfolio, net of liabilities of the National Bank to the second-tier banks and other clients, is greater than zero, the portion of such USD-denominated assets makes up at least 70 (seventy) percent of that volume. In case of non-compliance with this criterion, the Department of Monetary Operations corrects the violation within 14 (fourteen) calendar days. If the volume of assets in liquidity portfolio, net of liabilities of the National Bank to the second-tier banks and other clients, is less than zero, the target portion of the USD-denominated assets in liquidity portfolio makes up 50 (fifty) percent of the USD-denominated liabilities.

The following tables show the undiscounted cash flows on financial liabilities on the basis of their earliest possible contractual maturity. The total gross inflow and outflow disclosed in the tables is the contractual, undiscounted cash flow on the financial liabilities.

37. RISK MANAGEMENT, CONTINUED

Liquidity risk, continued

The maturity analysis for financial liabilities as at 31 December 2021 is as follows:

KZT'000	Demand and less than 1 month	From 1 to 3 months	From 3 to 6 months	From 6 to 12 months	More than 1 year	No maturity	Total gross amount inflow (outflow)	Carrying amount
Non-derivative financial liabilities								
Deposits and balances from banks and other financial institutions	5,848,105,753	403,814,622	367,213,263	-	-	580,722,821	7,199,856,459	7,197,414,543
Repurchase agreements	150,241,708	-	-	-	-	-	150,241,708	150,097,813
Current accounts of the National Fund of the Republic of Kazakhstan	1,062,130,685	-	-	-	-	-	1,062,130,685	1,062,130,685
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	905,119,437	-	-	-	-	-	905,119,437	904,928,019
Customer accounts	206,932,122	-	-	-	-	-	206,932,122	206,932,122
Debt securities issued	1,243,444,274	675,841,270	223,911,182	320,455,460	1,089,196,534	-	3,552,848,720	3,062,328,192
Estimated liabilities	61,130,493	-	-	-	-	-	61,130,493	61,130,493
Other financial liabilities	21,232,755	-	-	-	-	-	21,232,755	21,232,755
Derivative liabilities								
- Inflow	(23,075,142)	(166,723,835)	-	-	-	-	(189,798,977)	-
- Outflow	23,589,568	168,025,679	-	-	-	-	191,615,247	1,816,270
Total liabilities	9,498,851,653	1,080,957,736	591,124,445	320,455,460	1,089,196,534	580,722,821	13,161,308,649	12,668,010,892
Credit related commitments	361,011,670	-	-	-	-	-	361,011,670	361,011,670

37. RISK MANAGEMENT, CONTINUED

Liquidity risk, continued

The maturity analysis for financial liabilities as at 31 December 2020 is as follows:

KZT'000	Demand and less than 1 month	From 1 to 3 months	From 3 to 6 months	From 6 to 12 months	More than 1 year	No maturity	Total gross amount inflow (outflow)	Carrying amount
Non-derivative financial liabilities								
Deposits and balances from banks and other financial institutions	6,043,098,662	345,339,063	231,614,789	127,227,353	-	582,517,441	7,329,797,308	7,328,415,884
Repurchase agreements	100,685,323	-	-	-	-	-	100,685,323	100,597,147
Current accounts of the National Fund of the Republic of Kazakhstan	441,555,267	-	-	-	-	-	441,555,267	441,555,267
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	1,432,356,023	-	-	-	-	-	1,432,356,023	1,432,152,238
Customer accounts	239,047,013	-	-	-	-	-	239,047,013	239,047,013
Debt securities issued	1,512,731,407	965,145,835	670,428,176	207,487,345	572,190,272	-	3,927,983,035	3,645,971,357
Estimated liabilities	53,056,189	-	-	-	-	-	53,056,189	53,056,189
Other financial liabilities	24,499,850	-	-	-	-	-	24,499,850	24,499,850
Derivative liabilities								
- Inflow	(34,559,622)	(111,460,589)	-	-	-	-	(146,020,211)	-
- Outflow	35,024,083	111,964,293	-	-	-	-	146,988,376	968,165
Total liabilities	9,847,494,195	1,310,988,602	902,042,965	334,714,698	572,190,272	582,517,441	13,549,948,173	13,266,263,110
Credit related commitments	367,450,597	-	-	-	-	-	367,450,597	367,450,597

37. RISK MANAGEMENT, CONTINUED

Liquidity risk, continued

Management expects that the cash flows from certain financial liabilities will be different from their contractual terms either because management has the discretionary ability to manage the cash flows or because past experience indicates that cash flows will differ from contractual terms.

The gross nominal inflow/(outflow) disclosed in the tables above represent the contractual undiscounted cash flows relating to derivative financial liabilities held for risk management purposes. The disclosure shows a net amount for derivatives that are net settled, but a gross inflow and outflow amount for derivative liabilities that have simultaneous gross settlement (e.g., forward exchange contracts and currency swaps).



37. RISK MANAGEMENT, CONTINUED

Liquidity risk, continued

The table below shows an analysis, by expected maturities, of the amounts recognised in the consolidated statement of financial position as at 31 December 2021:

KZT'000	Demand and less than 1 month	From 1 to 3 months	From 3 to 12 months	From 1 to 5 years	More than 5 years	No maturity	Total
ASSETS							
Cash on hand in foreign currency	112,430,324	-	-	-	-	-	112,430,324
Gold	207,143,729	-	62,900,607	-	-	9,984,914,951	10,254,959,287
Placements and loans with banks and other financial institutions	981,283,513	1,182,091	-	237,462,171	1,275,572,791	700,067,456	3,195,568,022
Financial instruments under management at fair value through profit or loss	177,459	600,729	-	-	-	964,623,156	965,401,344
Reverse repurchase agreements	549,162,352	-	-	-	-	-	549,162,352
Investment securities measured at fair value through other comprehensive income	84,122,602	83,518,407	200,393,887	1,280,647,236	822,771,491	789,960,994	3,261,414,617
Investment securities measured at amortised cost	-	16,555,547	16,652,063	263,613,151	896,231,388	297,339	1,193,349,488
Investments in associates	-	-	-	-	-	7,255,451	7,255,451
Other financial assets	7,380,074	15,734,401	23,246,664	168,154,443	614,718,402	-	829,233,984
Total assets	1,941,700,053	117,591,175	303,193,221	1,949,877,001	3,609,294,072	12,447,119,347	20,368,774,869

37. RISK MANAGEMENT, CONTINUED

Liquidity risk, continued

	KZT'000	Demand and less than 1 month	From 1 to 3 months	From 3 to 12 months	From 1 to 5 years	More than 5 years	No maturity	Total
LIABILITIES								
Currency in circulation		–	–	–	–	–	3,452,220,118	3,452,220,118
Deposits and balances from banks and other financial institutions		5,843,529,635	403,814,622	369,345,829	–	–	580,724,457	7,197,414,543
Financial instruments under management at fair value through profit or loss		514,426	1,301,844	–	–	–	–	1,816,270
Repurchase agreements		150,097,813	–	–	–	–	–	150,097,813
Current accounts of the National Fund of the Republic of Kazakhstan		1,062,130,685	–	–	–	–	–	1,062,130,685
Current accounts of the Ministry of Finance of the Republic of Kazakhstan		904,928,019	–	–	–	–	–	904,928,019
Customer accounts		206,932,122	–	–	–	–	–	206,932,122
Debt securities issued		1,238,914,758	665,923,891	535,053,060	327,044,358	295,392,125	–	3,062,328,192
Estimated liabilities		61,130,493	–	–	–	–	–	61,130,493
Other financial liabilities		21,232,755	–	–	–	–	–	21,232,755
Total liabilities		9,489,410,706	1,071,040,357	904,398,889	327,044,358	295,392,125	4,032,944,575	16,120,231,010
Net position		(7,547,710,653)	(953,449,182)	(601,205,668)	1,622,832,643	3,313,901,947	8,414,174,772	4,248,543,859

37. RISK MANAGEMENT, CONTINUED

Liquidity risk, continued

The table below shows an analysis, by expected maturities, of the amounts recognised in the consolidated statement of financial position as at 31 December 2020:

KZT'000	Demand and less than 1 month	From 1 to 3 months	From 3 to 12 months	From 1 to 5 years	More than 5 years	No maturity	Total
ASSETS							
Cash on hand in foreign currency	122,879,854	–	–	–	–	–	122,879,854
Gold	452,881,456	300,653,693	47,759,093	–	–	9,144,975,429	9,946,269,671
Placements and loans with banks and other financial institutions	2,273,376,754	1,036,739	339,017,642	182,035,866	1,133,193,313	702,245,247	4,630,905,561
Financial instruments under management at fair value through profit or loss	238,403	262,297	–	–	–	632,525,226	633,025,926
Reverse repurchase agreements	20,012,508	–	–	–	–	–	20,012,508
Investment securities measured at fair value through other comprehensive income	10,759,438	79,204,450	464,319,894	1,436,825,989	826,601,763	765,725,523	3,583,437,057
Investment securities measured at amortised cost	–	14,481,523	153,462,063	184,163,170	769,836,979	–	1,121,943,735
Investments in associates	–	–	–	–	–	5,683,549	5,683,549
Other financial assets	17,296,978	3,654,579	424,659,212	102,605,021	425,001,894	–	973,217,684
Total assets	2,897,445,391	399,293,281	1,429,217,904	1,905,630,046	3,154,633,949	11,251,154,974	21,037,375,545

37. RISK MANAGEMENT, CONTINUED

Liquidity risk, continued

KZT'000	Demand and less than 1 month	From 1 to 3 months	From 3 to 12 months	From 1 to 5 years	More than 5 years	No maturity	Total
LIABILITIES							
Currency in circulation	–	–	–	–	–	3,250,868,479	3,250,868,479
Deposits and balances from banks and other financial institutions	6,042,127,080	345,339,063	358,842,141	–	–	582,107,600	7,328,415,884
Financial instruments under management at fair value through profit or loss	464,461	503,704	–	–	–	–	968,165
Repurchase agreements	100,597,147	–	–	–	–	–	100,597,147
Current accounts of the National Fund of the Republic of Kazakhstan	441,555,267	–	–	–	–	–	441,555,267
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	1,432,152,238	–	–	–	–	–	1,432,152,238
Customer accounts	239,047,013	–	–	–	–	–	239,047,013
Debt securities issued	1,417,890,747	940,779,240	728,229,532	331,206,463	227,865,375	–	3,645,971,357
Estimated liabilities	53,056,189	–	–	–	–	–	53,056,189
Other financial liabilities	24,499,850	–	–	–	–	–	24,499,850
Total liabilities	9,751,389,992	1,286,622,007	1,087,071,673	331,206,463	227,865,375	3,832,976,079	16,517,131,589
Net position	(6,853,944,601)	(887,328,726)	342,146,231	1,574,423,583	2,926,768,574	7,418,178,895	4,520,243,956

38. CREDIT RELATED COMMITMENTS

The National Bank has outstanding credit related commitments to extend loans. These credit related commitments take the form of approved loans and overdraft facilities.

The National Bank issues financial guarantees and letters of credit to guarantee the performance of customers to third parties. These agreements have fixed limits and generally have a validity period of up to five years.

The contractual amounts of credit related commitments are set out in the following table by category. The amounts reflected in the table for credit related commitments assume that amounts are fully advanced. The amounts reflected in the table for guarantees and letters of credit represent the maximum accounting loss that would be recognised at the reporting date if the counterparties failed completely to perform as contracted.

	2021 '000 KZT	2020 '000 KZT
Contracted amount		
Investment commitments	349,987,802	362,390,222
Loan and credit line commitments	11,000,000	5,036,507
Guarantees and letters of credit	23,868	23,868
	361,011,670	367,450,597

All credit related commitments relate to Stage 1 of credit risk.

NIC NBK JSC implements the programme of investments in alternative classes of assets through a special purpose vehicles and/or special purpose partnerships. As at 31 December 2021, they have payment liabilities to private equity funds and real estate funds of KZT 349,987,802 thousand (31 December 2020: KZT 362,390,222 thousand). These credit related commitments can be changed.

The total outstanding contractual credit related commitments above do not necessarily represent future cash requirements, as these credit related commitments may expire or terminate without being funded.

39. CONTINGENCIES

Insurance

The insurance industry in the Republic of Kazakhstan is in a developing state and many forms of insurance protection common in other parts of the world are not yet generally available. The National Bank does not have full coverage for its plant facilities, business interruption, or third-party liability in respect of property or environmental damage arising from accidents on the National Bank's property or relating to the National Bank's operations. Until the National Bank obtains adequate insurance coverage, there is a risk that the loss or destruction of certain assets could have a material adverse effect on the National Bank's operations and financial position.

39. CONTINGENCIES, CONTINUED

Litigation

Management is unaware of any significant actual, pending or threatened claims against the National Bank.

Taxation contingencies

The taxation system in Kazakhstan is relatively new and is characterised by frequent changes in legislation, official pronouncements and court decisions, which are often unclear, contradictory and subject to varying interpretation by different tax authorities. Taxes are subject to review and investigation by various levels of authorities, which have the authority to impose severe fines and interest charges. A tax year generally remains open for review by the tax authorities for five subsequent calendar years; however, under certain circumstances a tax year may remain open longer.

These circumstances may create tax risks in Kazakhstan that are more significant than in other countries. Management believes that it has provided adequately for tax liabilities based on its interpretations of applicable tax legislation, official pronouncements and court decisions. However, the interpretations of the relevant authorities could differ and the effect on these consolidated financial statements, if the authorities were successful in enforcing their interpretations, could be significant.

40. FUNDS MANAGEMENT, TRUST AND CUSTODY ACTIVITIES

Funds management and trust activities

The National Bank provides trust and asset management services to trust companies, retirement benefit plans and other institutions, whereby it holds and manages assets or invests funds received in various financial instruments at the direction of the customer.

The National Bank receives fee income for providing these services. Trust assets are not assets of the National Bank and are not recognised in the consolidated statement of financial position. The National Bank is not exposed to any credit risk related to such placements, as it does not guarantee these investments.

As at 31 December 2021, the total amount of assets that the National Bank holds and manages for outside organisations is KZT 3,180,558,984 thousand (31 December 2020: KZT 2,920,805,765 thousand).

As at 31 December 2021, the total amount of assets that the National Bank holds and manages for the National Fund is KZT 25,689,588,077 thousand (31 December 2020: KZT 25,886,664,948 thousand). A portion of these funds is managed by external managers in accordance with the investment policies set by the NBK.

40. FUNDS MANAGEMENT, TRUST AND CUSTODY ACTIVITIES, CONTINUED

Custody activities

During 2021 and 2020, the National Bank provided custody services to UNPF JSC. As at 31 December 2021, the total assets of UNPF JSC under the custodial service of the National Bank amounted to KZT 13,046,565,277 thousand (31 December 2020: KZT 12,894,602,814 thousand).

Assets of depositors

On 26 November 2012, the NBK acquired shares of Central Securities Depository JSC (the "Central Depository") which performs the accounting of financial instruments and money of their clients. Accounting for financial instruments and money of the Central Depository's clients is performed separately from its own financial instruments and money on off-balance sheet accounts.

As at 31 December 2020, the total amount of financial instruments and money in nominal holding and bank accounts of depositors in the Central Depository is KZT 105,158,753,517 thousand (31 December 2020: KZT 85,932,691,243 thousand).

41. RELATED PARTY TRANSACTIONS

Transactions with members of the Board of Directors and Management Board

The remuneration to the members of the National Bank's Management Board and the Board of Directors for the year 2021 totalled KZT 812,747 thousand (2020: KZT 862,149 thousand). The remuneration consists of salary and other payments.

41. RELATED PARTY TRANSACTIONS, CONTINUED

Transactions with other related parties

The outstanding balances and the related average interest rates as at 31 December 2021 and 31 December 2020 and related profit or loss amounts of transactions for the years then ended with other related parties are as follows.

	State companies and organisations			
	31 December 2021		31 December 2020	
	KZT'000	Average effective interest rate, %	KZT'000	Average effective interest rate, %
Consolidated statement of financial position				
ASSETS				
Gold	42,446,759	–	19,652,137	–
Placements and loans with banks and other financial institutions	1,454,530,013	6.09	885,095,436	6.06
Reverse repurchase agreements	549,162,352	10.75	20,012,508	10.00
Investment securities measured at fair value through other comprehensive income:				
Equity securities	750,000,000	–	750,000,000	–
Debt securities	383,229,528	7.88	547,448,409	8.18
Investment securities measured at amortised cost	1,004,335,966	8.70	830,710,297	8.39
Current tax asset	6,735,771	–	2,481,329	–
Deferred tax assets	346,258,930	–	325,613,503	–
Other assets	1,929,775	–	8,746,582	–

	State companies and organisations			
	31 December 2021		31 December 2020	
	KZT'000	Average effective interest rate, %	KZT'000	Average effective interest rate, %
LIABILITIES				
Deposits and balances from banks and other financial institutions	1,017,348,623	8.50	807,474,455	5.36
Repurchase agreements	150,097,813	8.75	100,597,147	8.00
Current accounts of the National Fund of the Republic of Kazakhstan	1,062,130,685	–	441,555,267	–
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	904,928,019	0.25	1,432,152,238	0.17
Customer accounts	203,822,963	–	237,851,911	–
Debt securities	782,577,344	9.72	860,804,619	9.72
Current tax liability	11,824	–	166	–
Deferred tax liabilities	2,610,066	–	2,406,637	–
Other liabilities	1,441,121	–	6,413,823	–

41. RELATED PARTY TRANSACTIONS, CONTINUED

Transactions with other related parties, continued

	State companies and organisations	
	2021	2020
	KZT'000	KZT'000
Consolidated statement of profit or loss		
Interest income calculated using the effective interest method	224,875,418	156,173,752
Interest expense	(111,945,741)	(51,092,967)
Fee and commission income	35,600,036	19,016,099
Fee and commission expense	(2,471,282)	(529,150)
Net gain on financial instruments at fair value through profit or loss	(9,534)	–
Net gain on financial instruments at fair value through other comprehensive income	4,787,580	7,826,628
Other operating income/(expense), net	1,540,707	824,688
Banknotes and coins production expenses	(38,213)	(110,256)
Personnel expenses	(1,085,424)	(1,324,090)
Other general and administrative expenses	(2,735,167)	(2,348,853)
Income tax benefit	19,237,436	89,716,100

42. FINANCIAL ASSETS AND LIABILITIES: FAIR VALUES AND ACCOUNTING CLASSIFICATIONS

Accounting classifications and fair values

The table below shows the carrying amounts and fair values of financial assets and financial liabilities as at 31 December 2021:

KZT'000	Designated at fair value in accordance with the Accounting Policy (Note 2)	Measured at FVTPL	Measured at FVOCI (debt)	Measured at FVOCI (equity)	Other at amortised cost	Total carrying amount	Fair value
ASSETS							
Cash on hand in foreign currency	-	-	-	-	112,430,324	112,430,324	112,430,324
Gold	10,254,959,287	-	-	-	-	10,254,959,287	10,254,959,287
Placements and loans with banks and other financial institutions	-	305,232,932	-	-	2,890,335,090	3,195,568,022	3,245,330,521
Financial instruments under management at fair value through profit or loss	-	965,401,344	-	-	-	965,401,344	965,401,344
Reverse repurchase agreements	-	-	-	-	549,162,352	549,162,352	549,162,352
Investment securities measured at fair value through other comprehensive income	-	-	2,484,982,259	26,432,358	-	2,511,414,617	2,511,414,617
Investment securities measured at amortised cost	-	-	-	-	1,193,349,488	1,193,349,488	1,085,494,674
Other financial assets	-	-	-	-	829,233,984	829,233,984	829,233,984
	10,254,959,287	1,270,634,276	2,484,982,259	26,432,358	5,574,511,238	19,611,519,418	19,553,427,103

42. FINANCIAL ASSETS AND LIABILITIES: FAIR VALUES AND ACCOUNTING CLASSIFICATIONS, CONTINUED

Accounting classifications and fair values, continued

KZT'000	Measured at FVTPL	Other at amortised cost	Total carrying amount	Fair value
LIABILITIES				
Currency in circulation	–	3,452,220,118	3,452,220,118	3,452,220,118
Deposits and balances from banks and other financial institutions	–	7,197,414,543	7,197,414,543	7,197,414,543
Financial instruments under management at fair value through profit or loss	1,816,270	–	1,816,270	1,816,270
Repurchase agreements	–	150,097,813	150,097,813	150,097,813
Current accounts of the National Fund of the Republic of Kazakhstan	–	1,062,130,685	1,062,130,685	1,062,130,685
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	–	904,928,019	904,928,019	904,928,019
Customer accounts	–	206,932,122	206,932,122	206,932,122
Debt securities issued	–	3,062,328,192	3,062,328,192	3,136,749,379
Estimated liabilities	–	61,130,493	61,130,493	61,130,493
Other financial liabilities	–	21,232,755	21,232,755	21,232,755
	1,816,270	16,118,414,740	16,120,231,010	16,194,652,197

42. FINANCIAL ASSETS AND LIABILITIES: FAIR VALUES AND ACCOUNTING CLASSIFICATIONS, CONTINUED

Accounting classifications and fair values, continued

The table below shows the carrying amounts and fair values of financial assets and financial liabilities as at 31 December 2020:

KZT'000	Designated at fair value in accordance with the Accounting Policy (Note 2)	Measured at FVTPL	Measured at FVOCI (debt)	Measured at FVOCI (equity)	Other at amortised cost	Total carrying amount	Fair value
ASSETS							
Cash on hand in foreign currency	-	-	-	-	122,879,854	122,879,854	122,879,854
Gold	9,946,269,671	-	-	-	-	9,946,269,671	9,946,269,671
Placements and loans with banks and other financial institutions	-	292,215,561	-	-	4,338,690,000	4,630,905,561	4,695,234,514
Financial instruments under management at fair value through profit or loss	-	633,025,926	-	-	-	633,025,926	633,025,926
Reverse repurchase agreements	-	-	-	-	20,012,508	20,012,508	19,121,142
Investment securities measured at fair value through other comprehensive income	-	-	2,827,941,030	5,496,027	-	2,833,437,057	2,833,437,057
Investment securities measured at amortised cost	-	-	-	-	1,121,943,735	1,121,943,735	1,011,484,991
Other financial assets	-	-	-	-	973,217,684	973,217,684	973,217,684
	9,946,269,671	925,241,487	2,827,941,030	5,496,027	6,576,743,781	20,281,691,996	20,234,670,839

42. FINANCIAL ASSETS AND LIABILITIES: FAIR VALUES AND ACCOUNTING CLASSIFICATIONS, CONTINUED

Accounting classifications and fair values, continued

	KZT'000	Measured at FVTPL	Other at amortised cost	Total carrying amount	Fair value
LIABILITIES					
Currency in circulation		-	3,250,868,479	3,250,868,479	3,250,868,479
Deposits and balances from banks and other financial institutions		-	7,328,415,884	7,328,415,884	7,328,415,884
Financial instruments under management at fair value through profit or loss		968,165	-	968,165	968,165
Repurchase agreements		-	100,597,147	100,597,147	94,346,826
Current accounts of the National Fund of the Republic of Kazakhstan		-	441,555,267	441,555,267	441,555,267
Current accounts of the Ministry of Finance of the Republic of Kazakhstan		-	1,432,152,238	1,432,152,238	1,432,152,238
Customer accounts		-	239,047,013	239,047,013	239,047,013
Debt securities issued		-	3,645,971,357	3,645,971,357	3,652,035,740
Estimated liabilities		-	53,056,189	53,056,189	53,056,189
Other financial liabilities		-	24,499,850	24,499,850	24,499,850
		968,165	16,516,163,424	16,517,131,589	16,516,945,651

42. FINANCIAL ASSETS AND LIABILITIES: FAIR VALUES AND ACCOUNTING CLASSIFICATIONS, CONTINUED

Accounting classifications and fair values, continued

The estimates of fair value are intended to approximate the price that would be received to sell an asset, or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

However, given the uncertainties and the use of subjective judgment, the fair value should not be interpreted as being realisable in an immediate sale of the assets or settlement of liabilities.

Fair values of financial assets and financial liabilities that are traded in active markets are based on quoted market prices or dealer price quotations. For all other financial instruments, the National Bank determines fair values using other valuation techniques.

The objective of valuation techniques is to arrive at a fair value determination that reflects the price that would be received to sell the asset or paid to transfer the liability in an orderly transaction between market participants at the measurement date.

Valuation techniques include net present value and discounted cash flow models, comparison to similar instruments for which market-observable prices exist and other valuation models. Assumptions and inputs used in valuation techniques include risk-free and benchmark interest rates, credit spreads and other premia used in estimating discount rates, bond and equity prices, foreign currency exchange rates, equity and equity index prices and expected price volatilities and correlations. The objective of valuation techniques is to arrive at a fair value determination that reflects the price of the financial instrument at the reporting date that would have been determined by market participants acting at arm's length.

The National Bank uses widely recognised valuation models for determining the fair value of common and more simple financial instruments, like interest rate and currency swaps that use only observable market data and require little management judgment and estimation. Observable prices and model inputs are usually available in the market for listed debt and equity securities, exchange traded derivatives and simple over the counter derivatives like interest rate swaps.

As at 31 December 2021 and 2020, fair value of investments in hedge funds, private equity funds and real estate funds is based on net assets value provided by Independent Administrator and/or Managing Director.

As disclosed in Note 22, the fair value of unquoted equity securities measured through other comprehensive income with a carrying amount of KZT 750,000,000 thousand (2020: KZT 750,000,000 thousand) cannot be determined.

As at 31 December 2021, there were no asset and liability parts of swap deals (31 December 2020: nil).

42. FINANCIAL ASSETS AND LIABILITIES: FAIR VALUES AND ACCOUNTING CLASSIFICATIONS, CONTINUED

Fair value hierarchy

The National Bank measures fair values using the following fair value hierarchy, which reflects the significance of the inputs used in making the measurements:

- ▶ Level 1: quoted market price (unadjusted) in an active market for an identical instrument;
- ▶ Level 2: inputs other than quoted prices included in Level 1 that are observable either directly (i.e. as prices) or indirectly (i.e. derived from prices). This category includes instruments valued using: quoted market prices in active markets for similar instruments; quoted prices for similar instruments in markets that are considered less than active; or other valuation techniques where all significant inputs are directly or indirectly observable from market;
- ▶ Level 3: inputs that are unobservable. This category includes all instruments where the valuation technique includes inputs not based on observable data and the unobservable inputs have a significant effect on the instrument's valuation. This category includes instruments that are valued based on quoted prices for similar instruments where significant unobservable adjustments or assumptions are required to reflect differences between the instruments.

The table below analyses financial instruments measured at fair value at 31 December 2021 and 31 December 2020, by the level in the fair value hierarchy into which the fair value measurement is categorised. The amounts are based on the values recognised in the consolidated statement of financial position:

31 December 2021 KZT'000	Level 1	Level 2	Level 3	Total
Gold	10,254,959,287	–	–	10,254,959,287
Placements and loans with banks and other financial institutions	–	305,232,932	–	305,232,932
Financial instruments under management at fair value through profit or loss				
– Derivative assets	727,089	51,100	–	778,189
– Equity investments	–	207,008,225	757,614,931	964,623,156
– Derivative liabilities	(1,800,527)	(15,743)	–	(1,816,270)
Investment securities measured at fair value through other comprehensive income				
– Debt and other fixed-income instruments	2,101,752,731	383,229,528	–	2,484,982,259
– Equity investments	26,432,358	–	–	26,432,358
	12,382,070,938	895,506,042	757,614,931	14,035,191,911

42. FINANCIAL ASSETS AND LIABILITIES: FAIR VALUES AND ACCOUNTING CLASSIFICATIONS, CONTINUED

Fair value hierarchy, continued

31 December 2020 KZT'000	Level 1	Level 2	Level 3	Total
Gold	9,946,269,671	–	–	9,946,269,671
Placements and loans with banks and other financial institutions	–	292,215,561	–	292,215,561
Financial instruments under management at fair value through profit or loss				
– Derivative assets	500,700	–	–	500,700
– Equity investments	–	179,299,439	453,225,787	632,525,226
– Derivative liabilities	(967,107)	(1,058)	–	(968,165)
Investment securities measured at fair value through other comprehensive income				
– Debt and other fixed-income instruments	2,280,492,622	547,448,409	–	2,827,941,031
– Equity investments	5,496,027	–	–	5,496,027
	12,231,791,913	1,018,962,351	453,225,787	13,703,980,051

The table below analyses financial instruments categorised into Level 3 in the fair value hierarchy as at 31 December 2021 and 31 December 2020.

	2021 KZT'000	2020 KZT'000
Fair value at the beginning of the year	453,225,787	234,026,940
Deposits	201,405,457	132,399,917
Payments	(107,976,586)	(27,069,972)
Gain recognised through profit or loss	195,127,109	85,828,787
Foreign currency revaluation reserve	15,833,163	28,040,115
Fair value at the end of the year	757,614,931	453,225,787

The National Bank's investments in equity investments, which are under management of NIC NBK JSC, categorised into Level 3 comprise holdings in investment private equity funds and real estate funds. These funds comprise investments in the funds and co-investments with the funds through the structure of the fund of funds made to accumulate the investors' funds to invest in share capital or securities of the invested companies (private equity funds) and investment in the funds through the structure of the fund of funds made to earn income from rent payment and/or increase in value of real estate (real estate funds). To consolidate the fair value of the National Bank's holdings in these investment funds for the years ended 31 December 2021 and 31 December 2020, the National Bank used reports prepared by independent administrators and/or managers of funds. The approach followed by independent administrators and/or managers was to estimate the fair value of the underlying portfolio investments held by each fund. As a cross check, administrators and managers also review fair values of investments as reported by each of the funds, and assesses the basis for material differences between the appraised fair value and fair values reported by the managers.



42. FINANCIAL ASSETS AND LIABILITIES: FAIR VALUES AND ACCOUNTING CLASSIFICATIONS, CONTINUED

Fair value hierarchy, continued

A number of valuation techniques, including financial models based on the last deals' prices, earnings coefficients and discounted cash flows, were used by independent administrators and/or managers to value the underlying portfolio investments, depending on the nature of the business concerned, the availability of market comparables, and the stage in the business's life cycle.

As at 31 December 2021, if the quotes for financial instruments would be 1 % lower, the effect on profit or loss would be a decrease in the fair value of KZT 7,576,149 thousand (31 December 2020: KZT 4,532,258 thousand).

The table below analyses financial instruments not measured at fair value at 31 December 2021, by the level in the fair value hierarchy into which the fair value measurement is categorised:

KZT'000	Level 1	Level 2	Total fair value	Total carrying amount
ASSETS				
Cash on hand in foreign currency	–	112,430,324	112,430,324	112,430,324
Placements and loans with banks and other financial institutions	–	2,940,097,589	2,940,097,589	2,890,335,090
Reverse repurchase agreements	–	549,162,352	549,162,352	549,162,352
Investment securities measured at amortised cost	56,254,294	877,771,226	934,025,520	1,193,349,488
Other financial assets	–	829,233,984	829,233,984	829,233,984
LIABILITIES				
Currency in circulation	–	3,452,220,118	3,452,220,118	3,452,220,118
Deposits and balances from banks and other financial institutions	–	7,197,414,543	7,197,414,543	7,197,414,543
Repurchase agreements	–	150,097,813	150,097,813	150,097,813
Current accounts of the National Fund of the Republic of Kazakhstan	–	1,062,130,685	1,062,130,685	1,062,130,685
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	–	904,928,019	904,928,019	904,928,019
Customer accounts	–	206,932,122	206,932,122	206,932,122
Debt securities issued	–	3,136,749,379	3,136,749,379	3,062,328,192
Estimated liabilities	–	61,130,493	61,130,493	61,130,493
Other financial liabilities	–	21,232,755	21,232,755	21,232,755

42. FINANCIAL ASSETS AND LIABILITIES: FAIR VALUES AND ACCOUNTING CLASSIFICATIONS, CONTINUED

Fair value hierarchy, continued

The table below analyses financial instruments not measured at fair value at 31 December 2020, by the level in the fair value hierarchy into which the fair value measurement is categorised:

KZT'000	Level 1	Level 2	Total fair value	Total carrying amount
ASSETS				
Cash on hand in foreign currency	–	122,879,854	122,879,854	122,879,854
Placements and loans with banks and other financial institutions	–	4,403,018,953	4,403,018,953	4,338,690,000
Reverse repurchase agreements	–	19,121,142	19,121,142	20,012,508
Investment securities measured at amortised cost	158,758,928	852,726,063	1,011,484,991	1,121,943,735
Other financial assets	–	973,217,684	973,217,684	973,217,684
LIABILITIES				
Currency in circulation	–	3,250,868,479	3,250,868,479	3,250,868,479
Deposits and balances from banks and other financial institutions	–	7,328,415,884	7,328,415,884	7,328,415,884
Repurchase agreements	–	100,597,147	100,597,147	100,597,147
Current accounts of the National Fund of the Republic of Kazakhstan	–	441,555,267	441,555,267	441,555,267
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	–	1,432,152,238	1,432,152,238	1,432,152,238
Customer accounts	–	239,047,013	239,047,013	239,047,013
Debt securities issued	–	3,652,035,740	3,652,035,740	3,645,971,357
Estimated liabilities	–	53,056,189	53,056,189	53,056,189
Other financial liabilities	–	24,499,850	24,499,850	24,499,850

43. SUBSEQUENT EVENTS

On 2 January 2022, protests started in Western Kazakhstan related to an increase in the liquefied natural gas price, which further spread to other cities in Kazakhstan. During the protests, protesters laid down a number of socio-economic and political demands. Despite the Government of the Republic of Kazakhstan has approved a set of specific measures to satisfy these demands, including to reduce gas prices, on 4-5 January, the protests turned into mass unrest coming with takeover of the city administrations buildings and the law enforcement agencies buildings. Key events unfolded in Almaty and the southern regions of the country.

Amid a serious and imminent threat to the safety of people, to ensure safety and security of people, restore law and rule of order, and protect the rights and freedoms of citizens, on 5 January 2022, the Government declared a state of emergency on the territory of the Republic of Kazakhstan.

The tragic events that occurred in Kazakhstan in early January 2022 have undoubtedly affected Kazakhstan's economy. The economic activity slowed down to 1.4%. This slowdown was primarily driven by a 1.7% decline in sales of both food and non-food products, particularly in Almaty, the region most affected by the unrest (a 42.1% decline in retail sales). At the same time, retail sales in the six regions remained flat, which indicates that a decline in demand this January was short-term.

43. SUBSEQUENT EVENTS, CONTINUED

Apart from sales, in January 2022, one saw drop in production in manufacturing industry, information and communications sector, accommodation and catering services, financial and insurance activities, operations with real estate, art business, entertainment and leisure.

However, the wider effects of the January events and their effect on the Kazakhstan economy, including any resulting impact on the National Bank's financial results in 2022, are not possible to determine at the date of approval of these consolidated financial statements.

This February, market was mainly driven by escalation of geopolitical tensions caused by serious deterioration of relations between Ukraine and the Russian Federation, which led to that unprecedented sanctions have been imposed against the Russian Federation: certain financial institutions were disconnected from the SWIFT network, and assets of the Central Bank of the Russian Federation were frozen.

The second-tier banks, which have their Kazakhstan-based subsidiaries including SB Sberbank JSC, SB VTB Bank (Kazakhstan) JSC and SB Alfa Bank JSC, were also subject to sanctions. The restrictions resulted in that international ratings of these financial institutions have been downgraded, and in an increase in expected credit losses on deposits in these second-tier banks.

KDIF JSC guarantees the payment of compensations on deposits of individuals and individual entrepreneurs in all banks that are participants in the deposit guarantee system, including in the aforementioned second-tier banks. At the same time, the National Bank believes that a significant increase in credit risks on the obligations of JSC KDIF is not expected.

Also as at 31 December 2021, KSF JSC held financial assets related to SB Sberbank JSC in the form of long-term claims on repurchased mortgage loans. As at 31 December 2021, the carrying amount of these financial assets was KZT 384,916,437 thousand. Considering the uncertainties about the situation around Russian companies, the National Bank regularly monitors the activity of this bank. As at the date of issue of the consolidated financial statements, the National Bank did not identify any direct impact of these events on the financial assets related to this bank. SB Sberbank JSC is a systemically important bank in Kazakhstan, and therefore, the government will support the bank if the situation worsens. To protect assets held in trust by the Russian subsidiary bank, the National Bank can re-place these assets in trust to be held by any other second-tier bank that is a participant of the KSF JSC owned programme.

The NBRK took an extraordinary decision to change the base rate, required to maintain price stability amid the risks from the external sector that may be realised if the geopolitical situation significantly deteriorates. This situation was considered under the negative scenario and plans for anti-crisis measures worked out by the NBRK and the Government of the Republic of Kazakhstan. As of 24 February 2022, the base rate is set at 13.5% per annum with an interest corridor of +/- 1.0 p.p. In addition, the government announced a programme to protect KZT-denominated deposits, by accruing compensation on the KZT-denominated deposits of individuals, from the state budget funds.

The NBRK remains committed to maintain the KZT exchange rate floating free, and reserves the right to conduct currency interventions against the excessive volatility of the exchange rate, to secure the financial system stability. Maintaining the Kazakhstan tenge exchange rate flexible would help safeguard gold and foreign currency assets, the importance of which has increased amid risks from the external sector.

During the period from 24 February to the date of issue of the consolidated financial statements, the exchange rate of the Kazakhstan tenge to the US dollar ranged from KZT 437.22 to KZT 512.19 per USD 1.00.

43. SUBSEQUENT EVENTS, CONTINUED

Liquidity risk

Geopolitical risks caused demand for gold to have increased. During February, the price of gold rose from USD 1,791 to USD 1,903 per ounce, or 6.3%, and hit multi-year highs in early March, exceeding USD 2,070 per ounce.

However, the positive effect of the rise in the price of gold and its sale was partially offset by the outflow of foreign-currency balances in the accounts held by second-tier banks with the National Bank, and by the currency interventions conducted by the NBRK.

To minimise the liquidity risk amid favourable gold pricing, the National Bank partially sold the stock of gold.

Currency risk

The National Bank has assets and liabilities denominated in several foreign currencies. Deprecation of KZT against USD and other foreign currencies will result in revaluation of financial assets. The net effect on equity in case of a 17% weakening of the Kazakhstan tenge against the US dollar will be KZT 2,098,365,987 thousand (based on currency exposure as at 25 March 2022).

Credit risk

The sanctions imposed on Russian banks are likely to increase credit risk in respect of the NBRK's requirements on the Russian banks' correspondent accounts (0.1% of all assets), which may result in recognition of additional expected credit losses. These correspondent accounts are used by the NBRK for the purposes of mutual settlements in national currencies.

Market risk

Market risk is reduced through maintaining the diversified structure of the gold and foreign currency reserves (the "GFCR"). Assets are invested in various securities issued by governments of foreign countries, and different classes of assets and currencies, which allows the portfolio to be kept diversified.

In particular, the GFCR consist of assets denominated in fully convertible currencies, in the national currency of the People's Republic of China, national currencies of the member states of the Eurasian Economic Union, short-term US Treasury Obligations, bonds of developed countries, emerging market bonds, investment-grade corporate securities, as well as investments in private capital, hedge funds, real estate and shares.

To ensure safeguarding of foreign-currency assets and protect it against reducing attractiveness for international financial markets, the National Bank also invests in gold, a traditional safe instrument.