







ANNUAL REPORT

of the National Bank of the Republic of Kazakhstan for 2020



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ANNUAL PERFORMANCE REVIEW

1. Given the external shock conditions caused by the coronavirus pandemic, the National Bank has been pursuing the adaptive monetary policy aimed at maintaining the inflation within 8-8.5% range and supporting the economic recovery in accordance with the instructions given by the President of the Republic of Kazakhstan.

During 2020, the base rate was changing depending on the economic conditions and was focused on ensuring the macroeconomic stability: on March 10, 2020, the base rate was increased from 9.25% to 12%; on April 3, 2020, it was reduced to 9.5% and from July 20, 2020 until the end of the year, it remained at 9% level.

As a result, as of year-end 2020, the inflation summed up to 7.5%, and Kazakhstan's GDP decreased by 2.6% in real terms.

In 2020, the current account deficit on the balance of payments amounted to 6.3 billion US Dollars (in 2019 - 7.3 billion US Dollars). The reduction of negative current account balance is primarily related to the decrease of returns payable to foreign investors and to an inflow of 1.3 billion US Dollars from the members of the Karachaganak consortium. During 2020, a net inflow on the financial account (excluding reserve assets) made up 15.3 billion US Dollars.

In 2020, a net capital inflow on foreign direct investments amounted to 5.9 billion US Dollars.

The external debt of the Republic of Kazakhstan during 2020 went up by 4.8 billion US Dollars to 163.4 billion US Dollars and accounted for 96.2% of GDP.

- 3. The National Bank continued to adhere to a free-floating exchange rate regime. The situation in the foreign exchange market in 2020 was developing under significant influence of external conditions: the spreading of coronavirus infection and the dynamics of oil prices in the global markets. In 2020, the exchange rate fluctuated within the range of 375.94 448.52 tenge per one US Dollar
- 4. Gross gold and foreign exchange reserves of the National Bank at the end of 2020 amounted to 35.6 billion US Dollars, with an annual growth of 23.1%.

The total market value of the National Fund's portfolio at the end of 2020 reached 61.4 billion US Dollars.

- 5. As of year-end 2020, the overall volume of pension assets of the Unified Accumulative Pension Fund that are under fiduciary management of the National Bank was 12.9 trillion tenge, having increased by 19.4% during 2020.
 - The return on pension assets distributed to accounts of contributors (recipients) of the Unified Accumulative Pension Fund in 2020 accounted for 10.92%, given the inflation at 7.5% level. In real terms, the rate of return accounted for 3.4%.
- 6. Deposits of residents in depository organizations went up by 16.1%, amounting to 22.1 trillion tenge. Over the year, deposits in the national currency had increased by 28.0% and reached 13.9 trillion tenge, foreign currency deposits grew up by 0.4% and amounted to 8.2 trillion tenge. At the end of 2020, the deposit dollarization went down to 37.3%.
- 7. As of year-end 2020, the volume of bank credits to the economy went up by 5.5% to 14.6 trillion tenge. During 2020, loans in the domestic currency increased by 10.1%, to 12.7 trillion tenge, whereas foreign currency loans went down by 17.7%, to 1.9 trillion tenge. As a result, the relative share of loans in tenge within the overall lending volume increased from 83.4% to 87.0%. In 2020, the long-term lending grew by 5.7%, to 12.5 trillion tenge, and short-term lending by 4.3%, to 2.1 trillion tenge.
- 8. Within the frame of financing the anti-crisis measures, the National Bank had underwritten a set of measures to support the economy and employment of the population for a total amount of 2.3 trillion tenge.
- 9. In 2020, 51.1 million transactions totaling 645.5 trillion tenge had been processed through the interbank system of money transfers and the interbank clearing system.
 - In 2020, non-cash operations via payment cards showed a 2.4 time growth in terms of quantity and a 2.5 time growth in terms of volume, amounting to 2.9 billion transactions of 35.3 trillion tenge. The percentage of non-cash operations in the overall structure of payments with the use of payment cards accounted for 91% in terms of quantity of transactions and for 68% in terms of volume.
- 10. At end-2020, the amount of cash in circulation was 3.3 trillion tenge, which exceeded its amount at the beginning of 2020 by 562.1 billion tenge, or by 20.9% (2.7 trillion tenge). In January 2020, circulating coins with the par value of 200 tenge were issued into circulation.

THE NATIONAL BANK'S GOAL 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's stability;
- carrying out statistical activities in the field of monetary statistics, financial market statistics and the external sector statistics.

Pursuant to the Law of the Republic of Kazakhstan dated July 3, 2019, "On Amendments to Some Legislative Acts of the Republic of Kazakhstan Regarding Regulation and Development of Financial Market, Microfinance Activities and Taxation", from January 1, 2020, the functions of government regulation, control and supervision of the financial market and financial organizations, protection of rights and lawful interests of the financial service consumers were delegated from the National Bank to the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market.

In July 2020, the National Bank, in accordance with the Presidential Decree of the Republic of Kazakhstan dated April 10, 2020 No. 304 "On Relocation of the National Bank of the Republic of Kazakhstan from the city of Almaty to the city of Nur-Sultan", had completed its move to the capital city.

A permanent representative office of the National Bank was opened in the city of Almaty. It will be ensuring efficient communication with the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market, Financial Institutions' Association of Kazakhstan, financial market entities and international financial institutions.







In 2020, the crisis caused by the COVID-19 pandemic led to a recession in the global economy, which outpowers the financial crisis of 2008-2009. Within the imposed lockdowns and quarantine restrictions, a drop in the business activity was observed in all the largest economies worldwide. At the industry level, the service sphere was hit to the greatest extent. So, according to assessments of the World Trade Organization, as of year-end 2020 the global trade decreased by 9.2% as compared to 2019, whereas in 2018, amidst the trade war between the USA and China, the decline accounted for 3.0% only. In turn, according to assessments of the International Air Transport Association, a reduction in the volume of international passenger turnover made up 60% as compared to 2019. The number of passengers decreased from 4.5 billion individuals in 2019 to 1.8 billion individuals. Losses of export revenues from international tourism as compared to 2019 amounted to 1.3 trillion US Dollars1.

In fighting against the spreading of coronavirus infection, many employers had suspended their operations or were forced to shut down their businesses. As a result, based on performance in 2020, about 8.8% of the working time was lost, which is equivalent to 255 million jobs². This is approximately four times higher than indicators of the 2008–2009 financial crisis. Despite the downturn in many sectors of the economy, the global industrial sector has recovered rather quickly, first of all, owing to the recovery of the Chinese economy as a result of faster exit from the lockdown as opposed to other countries. Thus, starting from July 2020, purchasing managers' indices in the industry are characterized by the positive dynamics³.

In general, the Chinese economy, among other large economies worldwide, turned out to be the only one that demonstrated positive growth rates in 2020. According to a preliminary assessment⁴, in 2020 the Chinese economy expanded by 2.3%. In addition to recovery of the industrial sector, the economic growth was secured by the increased investments into the infrastructure and real estate and by a boost in the foreign trade indicators due to the growing demand for electronics, pharmaceuticals, household appliances, etc. The government support measures expressed in a significant reduction of taxes and long-term lending to enterprises at a low interest rate played an important role in the economic recovery. In turn, feeble performance of the domestic demand, deterioration of relations with the USA and the EU alongside with the flood, which affected a large part of the country's territory, had a restraining effect. At the end of the year, the Yuan had appreciated by 0.2% against the US Dollar, and inflation, after its acceleration at the beginning of the year, had sharply decelerated to 0.2% by December 2020 due to a decline in prices of meat as a result of exhausted effect of the African swine pest.

Measures of control over the spreading of coronavirus alongside with the falling oil prices had a significant negative effect on the Russian economy in 2020. Nonetheless, starting from the middle of the year, owing to the easing of quarantine restrictions, the economy began to recover gradually. After an 8% nosedive in the second quarter of 2020, the rates of contraction of the economy slowed down to 3.1% by the end of 2020. A positive contribution was made by agriculture and the domestic consumption due to realization of

¹ According to the data from the World Tourism Organization

² According to the data from the World Labor Organization

³ According to the data from IHS Markit

⁴ According to the data from the National Bureau of Statistics of China

the deferred demand. A negative effect on the economy was exerted by a reduction in volumes of mineral production as a result of a decline in oil production within the framework of OPEC+ transaction. In such environment and given the presidential elections in the USA, in 2020 the Russian ruble depreciated against the US Dollar by 19.5%. In turn, because of depreciation of the ruble and the rise in prices for some foodstuffs, the annual inflation in Russia in December 2020 accelerated to 4.9%, topping the target of 4%.

The European Union's economy, after a sharp downfall in the middle of 2020 because of imposition of restriction measures against COVID-19 (in the second guarter of 2020, the drop accounted for 13.9%), in the third quarter began to ramp up production, which predicated deceleration of the GDP decline rates to 4.2%. A positive contribution to the development of economy in the European Union was made, first of all, by strong performance in the industry due to a rapid recovery of China. The investment activity was also demonstrating some revival. A strong growth was caused by realization of the deferred demand, especially for durable goods such as cars and technical devices. A negative contribution to the GDP was made by the tightened quarantine restrictions caused by recurrent outbreaks of COVID-19 in the second half of the year and by the process of agreement on a trade transaction between the European Union and the United Kingdom, which dragged out almost until the end of the year. Therefore, in 2020 the European currency depreciated against the US Dollar by 2.0% on average. Inflation was remaining low throughout the year accounting for 0.2% in December 2020.

Given the spreading COVID-19 infection and the imposition of various restriction measures, during 2020 the monetary policy of many central banks remained soft in order to support the economic growth. Therefore, the European Central Bank was maintaining the loan interest rate at zero level and the interest rate on

deposits – at –0.5% throughout the year. The European Central Bank also reported that interest rates would be maintained at the existing levels until inflation will approximate 2.0%. In turn, the US Federal Reserve System, for the first time since 2008, had reduced the rate in several rounds. As a result, by the middle of 2020 the federal funds rate was lowered to 0-0.25%.

The COVID-19 pandemic in 2020 appeared to be the main factor causing significant fluctuations in the global oil market. The average annual price of Brent oil in 2020 went down by 35.1% versus 2019. The global oil consumption during a dramatic decline in activity in April 2020 was going down to 80.6 million barrels a day, whereas in January 2020 it was at 96.7 million barrels a day. The market was somewhat stabilized by the actions of OPEC+ on reduction of oil production and by the easing of quarantine restrictions in oil importing countries. Being supported by the above factors, Brent oil price had approached 50 US dollars per barrel by the end of 2020.

In view of integration into the global economy, the effect of all above-mentioned factors could not but influence Kazakhstan's economy. Due to a dramatic fall in oil prices and reduced oil production, as well as the imposition of lockdown, Kazakhstan's economy experiencd a double shock. Nonetheless, the depth of economic downturn in Kazakhstan was much smaller as compared to the leading countries.

A further development of the global economy combined with the associated external economic conditions for Kazakhstan are still contingent on an increaseduncertainty due to the COVID-19 pandemic. Nonetheless, the development of vaccine against the virus and coordinated actions of countries are expected to ensure a more rapid recovery and comeback to the pre-crisis production rates that would also have an overall positive effect on Kazakhstan's economy.

⁵ According to the data from the Energy Information Administration



1.2 DOMESTIC TRENDS

1.2.1 INFLATION

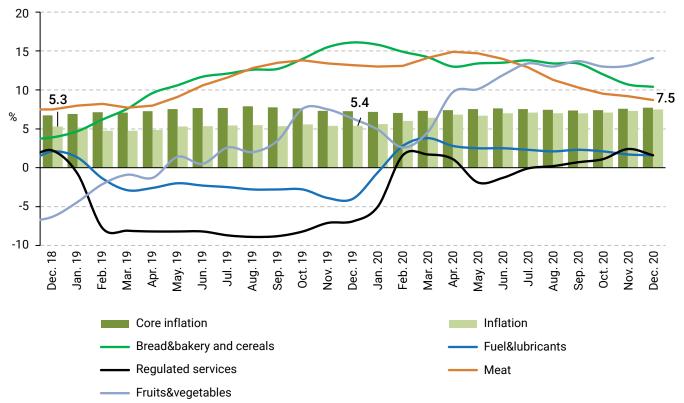
According to the data from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, the annual inflation in Kazakhstan at the end of 2020 accounted for 7.5% (2019 – 5.4%). From March 2020, inflation was forming above the target range of 4-6%.

Core inflation during the year stood above the headline inflation, having increased to 7.7% in annual terms in December 2020 (Figure 1.2.1.1).

Within the inflation structure, foodstuffs appreciated in terms of price by 11.3% (in 2019 – by 9.6%), non-food products – by 5.5% (5.0%), and paid services – by 4.2% (0.7%).

Acceleration of the food inflation was driven by the increased demand for certain goods combined with a limited supply resulting from disruption in the supply chains of raw commodities and products due to the state of emergency and quarantine measures. By the end of the year, a limited supply and the increased demand for imports led to a price surge in the global food markets.

Figure 1.2.1.1 Dynamics of the core inflation, inflation and its components as % of the corresponding period of the previous year



Source: BNS ASPR

A significant contribution to food inflation was made by the annual price growth of meat and meat products (8.7%), bread and bakery and cereals (10.4%), fruits and vegetables (14.1%), eggs (20%), oils and fats (21.6%), sugar (32.8%).

At the same time, the contribution of growth in prices of meat products decreased due to the deceleration in producer price growth and the existing ban for export of livestock, in the prices for bread and bakery and cereals – because of an earlier ending of the harvest season as compared to the previous year and replenishment of

cereal stocks. The increased imbalance in the markets of certain foodstuffs (an outbreak of bird flu, a sharp rise in prices of sugar and vegetable oil in Russia) and a hightened demand for immune-boosting products (fruits, vegetables) were conductive to acceleration.

An increased demand for non-durable goods (medications, detergents) made a positive contribution to the non-food inflation in the periods of aggravation in the epidemiological situation due to appreciation of imports in terms of price. Specifically, the annual growth in prices of pharmaceuticals accounted for 9.7%,

detergents and cleaning products – 10.2%. In addition, the increase of excise taxes at the beginning of the year had driven acceleration of gasoline price growth, which was limited later by the decreased demand. At the yearend, the rise in prices of gasoline made up 2.5%.

An upward impact on the service inflation was made by the exhausted effect from reduction of tariffs for regulated utility services in 2019. In 2020, the increase in tariffs for regulated utility services accounted for 1.6% (in 2019 – a 6.9% decline); however, the growth was limited by a temporary reduction of tariffs during the state of emergency as the support measures (March-April) and the introduction of temporary compensating tariffs. The main contribution to the advancement of tariffs was made by a 6.5% rise in price of electricity, which was driven by the increase in maximum tariffs for electricity producing companies from July 1, 2020. As for non-regulated services, all types of services except tourist services, appreciated in terms of price.

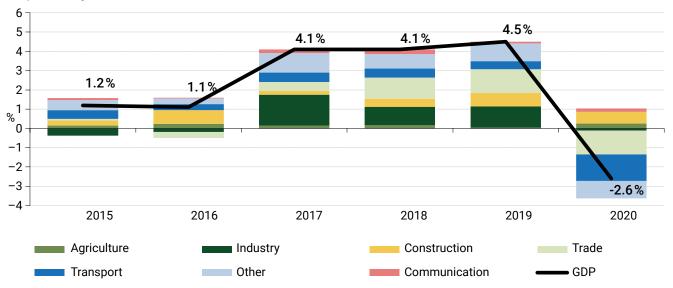
The pent-up consumer demand in the environment of quarantine restrictions in respect of operations of retail outlets and service facilities and the continuance of teleworking and online learning happened to be a restraining factor for inflation.

1.2.2 REAL SECTOR OF THE ECONOMY

In 2020 Kazakhstan's economy was developing under the impact of measures undertaken to fight the spreading of COVID-19 pandemic and a fall in world oil prices. These factors led to a significant decline in the economic activity in Kazakhstan.

According to updated information from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, during 2020 Kazakhstan's GDP decreased in real terms by 2.6% as compared to 2019 (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 previous year



Source: BNS ASPR

As both the external and the domestic demand weakened because of the impact of quarantine restrictions, the volumes of trade, transport services, real estate operations and administrative and ancillary services decreased.

During 2020, the industry contracted by 0.4% due to the decline in the mining industry by 3.7% in annual terms. A decline in production in the mining industry was caused by a 5.0% reduction in the wxytraction of crude oil and gas condensate in execution of the OPEC+ agreement. At the same time, reduction in the production volumes of metal ores (a 0.1% decline), namely the iron

ore (by 0.2%) and ores of non-ferrous metals (by 0.1%), had negatively affected the sector.

In 2020, volumes of wholesale and retail trade decreased by 7.3% in annual terms. Contraction in the sector is caused by a decline in selling volumes of the wholesale and retail trade by 7.4% and 4.1%, respectively. Reduction of the wholesale trade was driven by the decreased demand for the domestic export items on the part of their main consumers and by the execution of agreement under the OPEC+ framework (crude oil and metals). The reduction in retail sales is related to a slowdown in the consumer demand resulting from the decreased real money income of the population.

Alongside with the decline in the volumes of trade, in 2020 transport and warehousing services decreased to 17.2% in annual terms. The reduction in volumes of freight turnover by automobile and pipeline transport made a major contribution to the decline in the sector.

At the same time, a number of sectors made a positive contribution to the GDP dynamics. A 3.9% growth was observed in the manufacturing industry, which was driven by the increase in production of the metallurgical industry by 2.6%, foodstuffs by 4.0%, engineering by 16.3% and pharmaceutical products by 47.0%. At the same time, in 2020 due to the decreased consumer demand and a temporary shutdown of production facilities, there was a cutback in production in certain industries. Thus, production of petroleum products went down by 4.0% and of furniture – by 11.0%.

Despite a suspension of construction works because of the imposed state of emergency and lockdown in March-April 2020, the construction sector's growth at the end of the year accounted for 11.2%. The high growth was driven by the continuing implementation of government programs and infrastructure projects, particularly the construction of affordable housing within the frameworks of "Nurly Zher", "Bakytty Otbasy", "7-20-25" and "5-20-25" government programs, and the "Employment Roadmap for 2020–2021". In addition, implementation of the "Nurly Zhol" program allowed maintaining the growth rates in the construction of the country's transport and logistics infrastructure (construction of highways, roads, railways, bridges and tunnels).

During 2020, the gross agricultural output expanded by 5.6%, which was driven by the increase in the animal production and plant production by 3.0% and 7.8%, respectively.

Given the introduction of teleworking and online learning, communication services demonstrated positive dynamics with the growth accounting for 8.6%. The main contribution to the upturn in the sector was secured by the increased quantity of such services as the Internet, mobile communication and data transmission via telecommunication networks.

In turn, the household consumption and the investment activity in the economy demonstrated a significant decline being affected by negative factors in the environment of imposition of restrictive measures to fight the spreading of COVID-19 pandemic. Given a countercyclical focus of

the government policy, the positive growth rates were only retained by the general government spending

The real demand of households in the first quarter of 2020 preserved the positive dynamics. However, the imposition of the state of emergency, limitations for the operation of sales outlets, the growing numbers of temporary unemployed individuals and the loss of income by the people resulted in a two-digit reduction of the consumer demand (by 17.6%) in the second quarter of 2020. However, already in the third quarter of 2020, as the quarantine measures were gradually eased and the deferred demand was realizing, the recovery of household demand was observed (a 2.5% growth), which was also proved by the improved performance of retail sales in some months.

The reduction of real income of the population appeared to be the factor limiting a stronger growth in the demand. In the income structure, earnings from self-employment and hired labor decreased as a result of the decline in real wages of employees (in the third quarter of 2020 – by 0.1%). The growth was observed among income from retirement benefit payments owing to retention of the social focus in the government policy.

Besides, the COVID-19 pandemic led to significant changes in consumer preferences and spending in different countries of the world, as well as in Kazakhstan. So, the share of spending on paid services decreased while the household spending on foodstuffs increased significantly. According to the data from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, in 2020 the share of expenditures for foodstuffs in the structure of household consumer spending went up to 58% (2019 - 53.7%), with a parallel reduction in the share of expenditures for paid services to the population to 16.9% (21.6%). The share of expenditures for nonfood products had not significantly changed (25.1% versus 24.7%), which is due to the divergent trends in the demand for goods in the structure of this group.

In 2020, the investment activity in the economy decreased by 3.4% in annual terms. A decline of investments in the economy is directly related to the reduced investments in the mining industry because of a suspension of construction works in the largest oil field of "Tengiz Chevroil" under the "Future Growth Project". Contraction of fixed capital investments was also observed in the sectors of trade, construction and in the finance and insurance. In general, investments

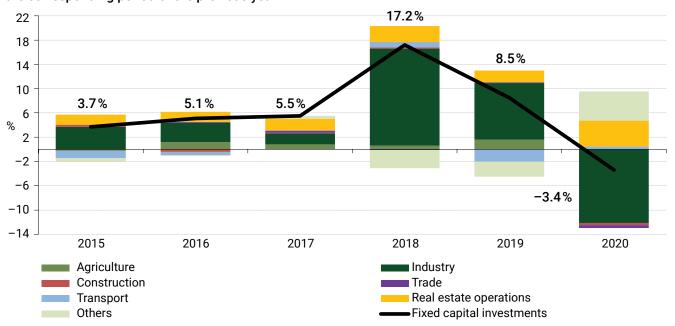
into other sectors demonstrated positive dynamics. In certain sectors, the investment activity accelerated during 2020: in the healthcare sector, it grew by 1.4 times, in arts and entertainment – by 1.2 times, in information and communication – by 35.5% in annual terms. In this context, investments into the economy excluding the mining industry went up by 14.8% (Figure 1.2.2.2).

Implementation of the government import substitution programs had a positive effect on investments into

the manufacturing industry, which increased by 3% at the end of 2020.

In the structure of fixed capital investments, there was a high growth in costs on construction and major overhaul of buildings and structures (by 10.7%) and a sizable decline of investments into machinery and equipment and other expenditures. The main source of funding of fixed capital investments is still represented by own funds of enterprises, whose share in the total investment volume in 2020 accounted for 78.8%.

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



Source: BNS ASPR

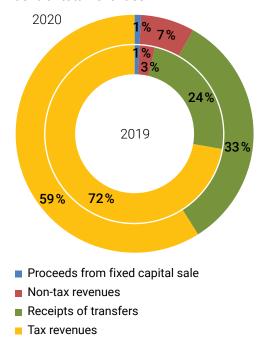
1.2.3 BUDGET AND FISCAL POLICY

Given that the macroeconomic situation deteriorated due to the spreading of coronavirus infection in Kazakhstan and the imposed state of emergency, the fiscal policy in 2020 was characterized by the increased budget spending – primarily, for social welfare and social security, healthcare, education and public utilities. The growth of the expenditure side of the budget against the increased volumes of transfers from the National Fund was determined by the need to support the economy and to

implement the anti-crisis measures by the Government of the Republic of Kazakhstan.

At the end of 2020, about two thirds of the state budget revenues were composed of tax revenues (59%), and nearly one third of them (33%) consisted of transfers (Figure 1.2.3.1). At the end of 2020, the largest shares in the structure of tax revenues fell on the value-added tax (30%), corporate income tax (24%), and individual tax (11%).

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



During 2020, tax revenues to the country's budget decreased by 7.1%. The largest decline within the tax structure was demonstrated by receipts from the value-added tax – by 5.9% (given the imposed restriction measures in fighting against the spreading of coronavirus, production of services went down by 5.6%), by receipts for the use of natural and other resources – by 9.3% and by other taxes – by 32% (the major share falls on the export customs duty for crude oil).

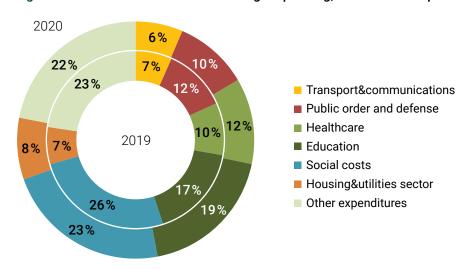
The volume of receipts from excise taxes went up by 25.9% (due to the increased rate of excise taxes for tobacco and alcohol products), from individual income $\tan - by 6.1\%$, from social $\tan - by 4.4\%$.

Receipts of transfers from the National Fund to the budget went up by 55.4% – from 3.1 trillion tenge in 2019 to 4.8 trillion tenge in 2020.

The state budget spending in 2020 increased by 23.6% as compared to 2019. A significant growth was observed among the items, which have traditionally been the main beneficiaries of government spending. Expenditures for social welfare and social security went up by 9% (given a double indexation of retirement benefits, allowances and subsistence allowances), education – by 34.7% (due to the raise of salaries to teachers), healthcare – by 51.4% (the growth was caused by anti-epidemiological measures taken to fight the spreading of coronavirus), housing and utilities sector – by 53.9% (implementation of arrangements of the Government Program for Housing and Communal Development "Nurly Zher" for 2020–2025) (Figure 1.2.3.2).

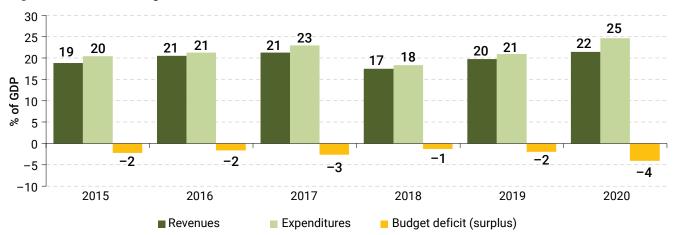
A 49.4% rise in expenditures under the "Others" item was driven by the earmarked current transfers to the regional budgets, to the budgets of towns of national importance, for compensation of losses in connection with the reduction of tax burden for small and medium-sized businesses.

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



At the end of 2020, the state budget deficit amounted to 2.8 trillion tenge, or 4.0% of GDP (Figure 1.2.3.3).

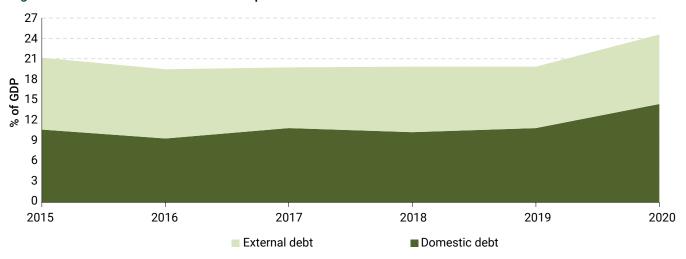
Figure 1.2.3.3 State budget execution



Receipts to the National Fund (excluding investment return) were lower by more than three times versus the volumes of transfers allocated to the national budget. This was because of a 50.6% reduction in receipts of direct taxes from the oil sector enterprises (except taxes charged to the local budget). The decline occurred mainly due to a 65.4% decrease in receipts from the corporate income tax and a 34.4% contraction in the share of the Republic of Kazakhstan in the production sharing under the concluded contracts. Besides, receipts from the mineral production tax and rent tax on exported crude oil also went down by 21.9% and 62.8%, respectively. Returns from the management of the National Fund doubled as compared to the last year.

At the end of 2020, external government debt amounted to 6.9 trillion tenge (16.4 billion US Dollars), or 10.2% of GDP, having increased by 18.8% as compared to 2019 (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 – 56.1% as well as foreign loans of the International Bank for Reconstruction and Development – 21.4% and Asian Development Bank – 13.7%. The domestic debt of the Government of the Republic of Kazakhstan went up by 38.5% because of a 48.7% growth in long-term treasury obligations and at end-year 2020 amounted to 9.8 trillion tenge, or 14.4% 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 2020, the current account showed up a deficit of 6.3 billion US Dollars (in 2019 – 7.3 billion US Dollars) (Appendix 1 to Section 1.2.4, Table 1.2.4.1). The reduction in the negative current account balance is primarily associated with a contraction in returns payable to foreign investors and with the inflow of foreign currency of 1.3 billion US Dollars from the members of the Karachaganak Consortium that was received under the framework of dispute resolution between the Republic of Kazakhstan and the Consortium.

The balance of trade surplus went down by 42.1%, to 10.5 billion US Dollars, owing to a more considerable reduction in the exports of goods as compared to the decline in the imports of goods.

During 2020, world prices of Brent oil fell by 33.9% on average versus 2019, amounting to 42.3 US Dollars per barrel (in 2019 – 64.0 US Dollars per barrel). Exports of goods decreased by 19.7% versus 2019 and equaled 46.7 billion US Dollars. The cost of exports of oil and gas condensate (50.5% of official exports) went down by 29.4%, or by 9.9 billion US Dollars, and exports of ferrous metals declined by 8.9% because of the decreased contractual prices. Exports of non-ferrous metals declined by 0.8%, and exports of cereals increased by 1.1%.

Imports of goods went down by 9.6% versus 2019 and amounted to 36.2 billion US Dollars. The reduction in imports of goods is associated with the contraction in the import of interim goods by 13.1% (by 1.7 billion US Dollars) and investment goods by 10.1% (by 1.6 billion US Dollars).

The deficit in the balance of international services decreased by 17.6%, to 3.1 billion US Dollars, versus the indicator for 2019; along with that, exports of services declined by 35.0%, and imports of services went down by 29.4%. The foreign trade turnover on international services fell by 31.6% and amounted to 13.1 billion US Dollars.

The deficit in the balance on primary income equaled 14.9 billion US Dollars, having decreased by 34.4% versus 2019, because of reduction in returns of foreign direct investors.

Returns of residents on their investments went down by 19.1%, amounting to 1.9 billion US Dollars. Half of such returns falls on revenues on the country's official reserves (reserve assets and foreign assets of the National Fund), which contracted by 17.2%, to 1.0 billion US Dollars.

Investment returns payable to foreign investors went down by 32%, to 16.1 billion US Dollars, where return of non-residents on direct investments decreased by 34.6% – from 21.3 billion US Dollars in 2019 to 13.9 billion US Dollars in 2020. Of which, 62% are represented by returns on equity participation in the form of distributed income and dividends or in the form of a 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 decreased by 9.7% and equaled 2.2 billion US Dollars.

A net inflow on the financial account (excluding reserve assets) in 2020 amounted to 15.3 billion US Dollars (in 2019 – a net outflow of 1.6 billion US Dollars). The increase in liabilities of residents and the decline in their assets secured a net capital inflow on financial operations or "net borrowing from the rest of the world".

In 2020, a net capital inflow (a negative balance) on foreign direct investments amounted to 5.9 billion US Dollars (in 2019 –5.5 billion US Dollars) and was secured by the growth in liabilities of residents. The increase in financial assets on foreign direct investments of 1.3 billion US Dollars was associated with the expanded participation of Kazakhstani enterprises in equity of foreign organizations and with their funding of foreign affiliated companies.

The rise in liabilities on foreign direct investments amounted to 7.3 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) and the growing debt obligations to foreign affiliated entities.

A gross inflow of foreign direct investments into Kazakhstan decreased by 29.8% versus 2019 and equaled 17.1 billion US Dollars. Investments into extraction of crude oil and natural gas (37.8% of the gross inflow of foreign direct investments in 2020) went down by 46.9% and amounted to 6.5 billion US Dollars. Foreign direct investments into the metallurgical industry

(14.7% of the gross inflow) had contracted by 10.2%, to 2.5 billion US Dollars; FDIs into the wholesale and retail trade, car repair (14.9% of the gross inflow) went down by 14.6%, to 2.5 billion US Dollars; investments into transport and warehousing (5.1% of the gross inflow) decreased by 21.4%, to 0.9 billion US Dollars, into finance and insurance (6.0% of the gross inflow) – by 0.2%, to 1.0 billion US Dollars.

In the structure of gross inflow of foreign direct investments by countries, the Netherlands are dominating (30.1% of gross receipts), followed by the USA (13.1%), Switzerland (10.4%), the Russian Federation (7.1%), China (5.6%), Great Britain (5.0%), Belgium (4.6%), France (4.1%) and the Republic of Korea (2.7%).

A net capital inflow on portfolio investments amounted to 7.7 billion US Dollars (in 2019 - a net outflow of 5.1 billion US Dollars). The capital inflow was secured by reduction in foreign assets of residents by 6.7 billion US Dollars, including assets of the National Fund. The increase in assets of the Unified Accumulative Pension Fund in foreign securities in the fourth quarter of 2020 had partly offset the inflow on assets. The growth in liabilities of residents on portfolio investments by 1.0 billion US Dollars is associated with the placement of the ruble-denominated sovereign bonds by the Ministry of Finance of the Republic of Kazakhstan and with the issuance of global depositary receipts of the "Kaspi. kz" JSC in the fourth quarter of 2020. In addition, the purchase of the National Bank's short-term notes and bonds of Kazakhstani issuers by foreign investors had influenced the net inflow.

There was a net capital inflow of 2.0 billion US Dollars on medium- and long-term debt instruments reported under "Other investments" item (in 2019 – 0.3 billion US Dollars). The inflow was secured by the borrowing of a government loan from the Asian Development Bank of 0.9 billion Euro and by the growth in liabilities of Kazakhstani enterprises to non-residents on long-term credits and loans. At the same time, repayment of foreign loans provided by residents also influenced a net inflow.

A net capital outflow on short-term debt instruments amounted to 195.2 million US Dollars in 2020 (in 2019 – 2.4 billion US Dollars). A 1.4 billion US Dollars buildup in short-term assets of non-residents was caused by the growth in foreign cash held by the population

(according to the NBRK's assessment of operations of individuals with foreign cash unclassified in the balance of payments). Liabilities of residents went up by 1.2 billion US Dollars due to the increase in deposits of non-residents at Kazakhstani banks and the growing receivables of Kazakhstani enterprises.

Reserve assets (excluding assets of the National Fund) as at January 1, 2021 were estimated at 35.6 billion US Dollars, thus covering the financing needs of 9.7 months of Kazakhstani imports of goods and services.

At the end of 2020, the external debt of the Republic of Kazakhstan amounted to 163.4 billion US Dollars, of which 9.3% or 15.2 billion US Dollars represent the public sector's external debt, 3.0% or 5.0 billion US Dollars – external debt of the sector of "Banks", 25.7% or 42.0 billion US Dollars – debt of "Other sectors" not related to direct investments, and 61.9% or 101.2 billion US Dollars is the intercompany debt of the sector (Appendix 2 to Section 1.2.4, Table 1.2.4.2).

During 2020, the country's external debt expanded by 4.8 billion US Dollars (in 2019 – a decline of 1.2 billion US Dollars) due to the balance of payments operations (for 4.9 billion US Dollars) and the growing market value of Eurobonds of the government and quasi-government issuers (by 1.0 billion US Dollars), which were partially offset by other non-operational changes (by 1.1 billion US Dollars).

In 2020, the external debt of the Government of the Republic of Kazakhstan went up by 1.5 billion US Dollars because of the borrowings by the Ministry of Finance of the Republic of Kazakhstan from the Asian Development Bank taken to reduce a negative impact of the COVID-19 pandemic on the economy. They were partially compensated by repayment of existing foreign loans and by the issuance of the ruble-denominated bonds and the rise in the market value of sovereign Eurobonds.

Foreign liabilities of the National Bank increased by 0.4 billion US Dollars owing to the growing demand for short-term notes on the part of foreign investors.

External debt of banks decreased by 0.2 million US Dollars due to the inflow of funds from non-residents to accounts with Kazakhstani banks that was partially offset by a scheduled repayment of Eurobonds of the "Development Bank of Kazakhstan" JSC.

The economic slowdown caused by the falling oil price and the impact of the COVID-19 pandemic resulted in the decreased output and the increased need in foreign financing. As a result, at the end of 2020, the external debt to the GDP accounted for 96.2% (at the end of 2019 – 87.3%). However, due to reduction of annual volumes of exports of goods and services, the ratio of external debt to exports was 315.7% (at the end of 2019 – 240.4%) (Appendix 3 to Section 1.2.4, Table 1.2.4.3).

The net external debt of Kazakhstan in 2020 expanded by 13.3 billion US Dollars, to 63.6 billion US Dollars and equaled 37.5% of GDP. The government sector and the sector of "Banks" act as a net lender to the rest of the world (40.9 billion US Dollars and 1.4 billion US Dollars, respectively), and "Other sectors" – as a net debtor (105.9 billion US Dollars).

1.3 MONETARY POLICY

1.3.1 ENSURING THE PRICE STABILITY: GOAL AND MEASURES

In 2020, the National Bank implemented its monetary policy in accordance with the principles of inflation targeting. The inflation goal in 2020 was set at 4-6%. Given the realization of external shock and a significant acceleration of the price growth, the National Bank concentrated on ensuring the macroeconomic stability, supporting the economic recovery and reducing proinflation risks.

On February 3, 2020, the National Bank retained its base rate at 9.25%. The decision was made based on the anticipated short-term rise in the annual inflation rate to the upper boundary of the target band of 4-6% at the end of February. In the later months, inflation was expected to decelerate to the mid-point of the target band followed by its reduction in the medium-term perspective.

However, at the beginning of March 2020, the situation in the global economy changed dramatically. The spreading of coronavirus turned into a global pandemic. Concurrently, the world prices of oil nosedived as a result of its growing production and the decreasing consumption. Inflationary processes accelerated.

In the environment of high uncertainty, in order to prevent the outspread of negative consequences

of external shock on the country's economy and to ensure the macroeconomic stability, the National Bank tightened monetary conditions. On March 10, 2020, an extraordinary decision was made to increase the base rate to 12% with a widening of the interest rate band to +/- 1.5 pp. This allowed limiting the increase of inflation expectations, mitigating the pressure on the exchange rate and reducing the depreciation of the tenge. At the next regular meeting on March 16, 2020, the base rate was retained at the same level.

In March 2020, the annual inflation went above the upper boundary of the set target band accounting for 6.4% and kept accelerating gradually until the end of 2020. The main contribution to acceleration of inflation was made by the rise in food prices against the moderate dynamics of prices for non-food products and paid services.

In the environment of quarantine measures limiting the business activity and, as a consequence, of significant reduction in the domestic demand, on April 3, 2020, the National Bank made an extraordinary decision to lower the base rate to 9.5% per annum with the expansion of the interest rate band to +/- 2 pp. Such decision became a part of the National Bank's measures aimed at smoothing the effects of coronavirus on Kazakhstan's economy. Later, on April 27 and June 8, 2020, the National Bank twice retained the base rate at that level.

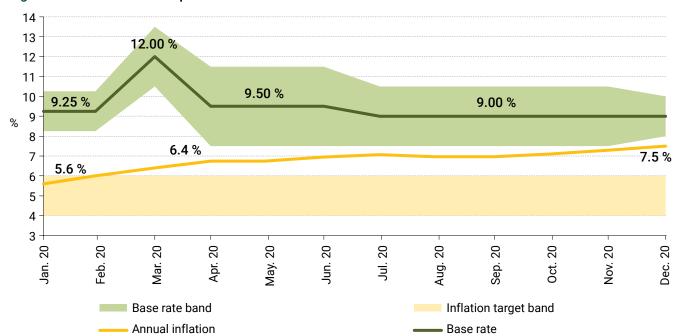


Figure 1.3.1.1 The base rate path and the annual inflation rate

The changing situation in the global oil market from May 2020 and prospects of the price dynamics were integral to the National Bank's revision of the inflation forecasts. From July 2020, in accordance with the updated forecasts and in pursuance of instructions of the President of the Republic of Kazakhstan, the National Bank focused on maintaining the annual inflation at the level not exceeding 8-8.5% at the end of the year.

In view of the dominating disinflationary trends, in July 2020 the National Bank once again eased its monetary policy in order to mitigate negative consequences of outspreading coronavirus and to support the economic recovery. On July 20, 2020, the decision to lower the base rate to 9.0% was made.

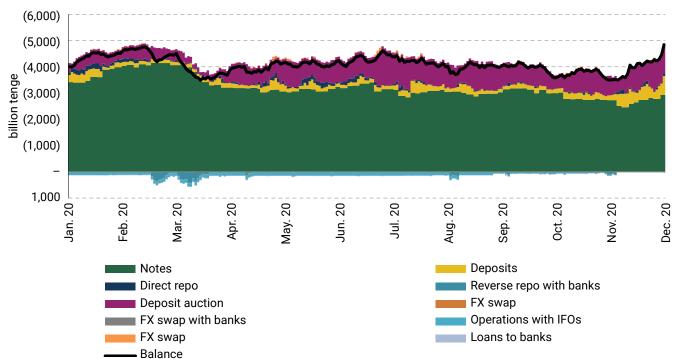
In the time following, the base rate was maintained at 9% until the end of 2020 (Figure 1.3.1.1). The main accompanying factors for such decisions included the dynamics of actual inflation, instability in the oil market, the growing inflation expectations and the uncertainty associated with the epidemiological situation in the country and worldwide.

At the end of 2020, inflation accounted for 7.5%, exceeding the established target band. In 2021–2022, the National Bank will be committed to reducing the inflation and bringing it back to the target range of 4-6%. The decisions on the base rate will depend on correspondence of the actual inflation dynamics to the projected path, on the speed of decline in inflation expectations and on the balance of inflation risks.

1.3.2 MONEY MARKET

In 2020, the money market was functioning in the environment of excess liquidity, which amounted to 4.8 trillion tenge at the year-end (at the beginning of the year – 4.1 trillion tenge) (Figure 1.3.2.1). The anticrisis measures taken as part of support to the economy in the environment of coronavirus pandemic fueled the growth of the liquidity surplus in the money market. Given the structural liquidity surplus of the tenge, the National Bank was withdrawing excess liquidity in order to prevent the pressure on inflation.

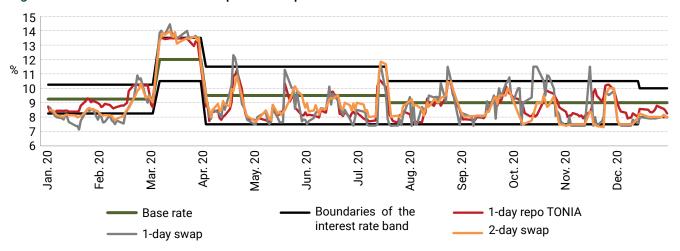
Figure 1.3.2.1 Exposure on the National Bank's operations



A significant change in the macroeconomic situation in March 2020 as a result of the spreading of coronavirus across the globe and a decline in oil prices affected the money market. With an aim to stabilize the situation, the monetary policy measures were taken to change the level of the base rate and the width of its band, which ensured that interest rates in the money market were forming within the target interest rate band.

A heightened demand for liquidity in the tenge and the increase of the base rate in the period of high turbulence in foreign and domestic markets in March 2020 led to the corresponding growth of interest rates and their setting close to the upper boundary of the interest rate band (Figure 1.3.2.2).

Figure 1.3.2.2 Interest rates in the repo and swap markets



As the situation in foreign and domestic markets improved, the demand for the tenge liquidity started to stabilize, resulting in reduction of interest rates in the money market after a surge in March 2020.

During the year, interest rates in the market in certain periods were demonstrating heightened volatility, which was driven by the periods of tax payments and by depreciation of the exchange rate of the tenge. In the first half of the year, the demand for the tenge liquidity in the overnight repo market on the part of banks was growing because of high volatility in foreign and domestic markets (Figure 1.3.2.3).

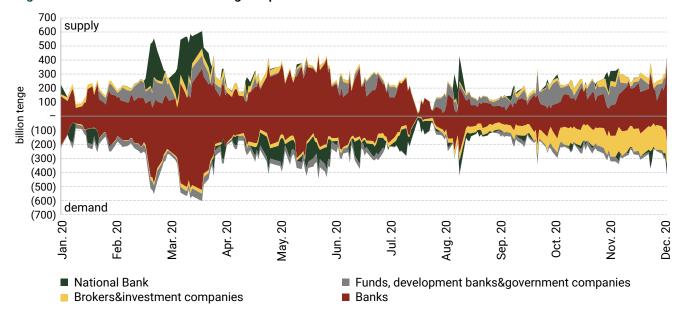
The National Bank was a permanent party to the overnight repo market. In the setting of quarantine measures, the National Bank provided liquidity to the professional market participants on a daily basis without any restrictions.

By the end of the year, the demand for liquidity in the overnight repo market was forming mainly on the part of brokers, investment companies, and the supply of the tenge – on the part of banks, funds, development banks and government companies.

In the first half of the year, rates on placement of liquidity from the overnight repo were concentrated (more than 70% of placements) closer to the lower boundary of the band. In the second half of the year, concentration of placement rates of the tenge in the overnight repo market shifted to the level of the base rate. Despite the fact that the base rate band was set at +/-1.5 pp. in the largest portion of the second half-year, interest rates were forming closer to the base rate in the range of +/-1 pp.

Rates in the swap market were generally setting closer to the TONIA rate. In the periods when interest rates in the repo market were growing and the demand for the tenge liquidity was increasing, the spread was expanding.

Figure 1.3.2.3 Structure of the overnight repo market in 2020



In order to make the liquidity management more effective and to reduce transaction costs, from August the "Kazakhstan Stock Exchange" JSC moved the exchange trading in the stock market to a new trading and clearing system, ASTS+, and started to perform the functions of a central counterparty, which significantly decreased the risks for all participants. The repo market was divided into repos with the central counterparty and repos with gross settlements. Operations of the National Bank were conducted only in the sector of repos with the central counterparty.

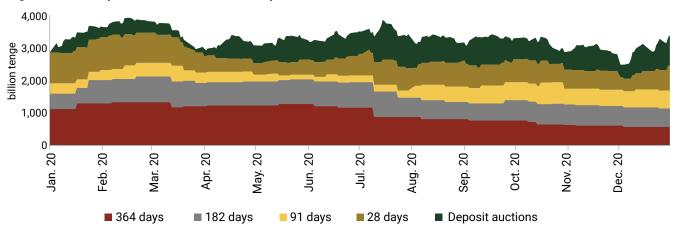
As part of the effort to develop the financial derivatives market, from December 2020 the procedure for calculation of the money market indicator TONIA was changed. Under the updated methodology, the TONIA

index became more market-based creating prerequisites for hedging the interest rate risk and using TONIA for issuance of the floating rate instruments.

As for the FX swaps on the stock exchange, in 2020 the methodology for calculation of the liquidity withdrawal rate was changed by replacing the LIBOR rate in the calculation formula with the effective federal funds rate (EFFR).

In the course of the monetary policy implementation, open market instruments were used in addition to standing facility operations. In doing so, by the end of the year the volume of notes in circulation went down to 2 927.3 billion tenge while exposures on deposit auctions increased to 1 129.7 billion tenge (Figure 1.3.2.4).

Figure 1.3.2.4 Exposure on notes and the deposit auction



The reduction in notes occurred as a result of suspension in issuance of 12-month notes from July 2020 and limitation of the note issuance volume of notes with maturity of 182 days at the level of 100 billion tenge within one auction from the fourth quarter of 2020. These measures were undertaken to re-direct free liquidity for financing the national budget deficit. For that purpose, the Ministry of Finance of the Republic of Kazakhstan in consultation with the National Bank, prepared a new schedule of government securities issues with the mostly demanded maturities from 1 to 3 years; this, alongside with the termination of one-year note issuance, led to an overflow of excess liquidity in the tenge from the National Bank's instruments to the government securities. Meanwhile, the share of market investor participation in placements of government securities increased significantly, thus exerting a positive effect on the liquidity level of the government debt market.

At the same time, in 2020 the collaboration with the Ministry of Finance of the Republic of Kazakhstan in building the yield curve, increasing attractiveness of the tenge instruments and boosting liquidity of the government bond market was continued.

The National Bank, jointly with the Kazakhstan Stock Exchange, in order to increase liquidity of the secondary government securities market, designed implemented the stimulative program for the market makers on government securities at the stock exchange platform. This program provides for a certain package of favorable terms for professional market participants in case of their execution of the function of market maker on government securities in the stock market. Successful implementation of the program will promote the increasing activity of market participants in the market and the growth in the number of market makers on government securities, which will have a positive effect on liquidity of the secondary market as a whole.

The National Bank, in cooperation with the Ministry of Finance, went on with the effort of including the sovereign bonds of the Republic of Kazakhstan into the J.P. Morgan Government Bond Index-Emerging Markets (GBI-EM). For these purposes, a joint "Action Plan for Inclusion of Government Securities into International Indices for 2020–2022", which complies with requirements and the terms and conditions of the index provider, was designed and adopted together with the concerned government agencies.

In August 2020, with a view to develop the local stock market, the international line of settlements on government securities between the domestic securities depository and the international ClearStream was upgraded to the Delivery versus Payment (DVP) type, which enables to reduce risks for global investors when investing into the government bonds and is in accordance with the best international practice. The transition to the DVP format will also have a positive effect on liquidity in the local government securities market and will create an advantage in the environment of competition for foreign capital flows.

1.3.3 FOREIGN EXCHANGE MARKET

In 2020, the situation in the foreign exchange market was developing under a significant impact of external conditions. Given the worldwide spread of coronavirus and the global quarantine restrictions imposed, in March 2020, the price of Brent oil during the first quarter of 2020 dropped by a record-low 65.6% – from 66 to 22.7 US dollars per barrel.

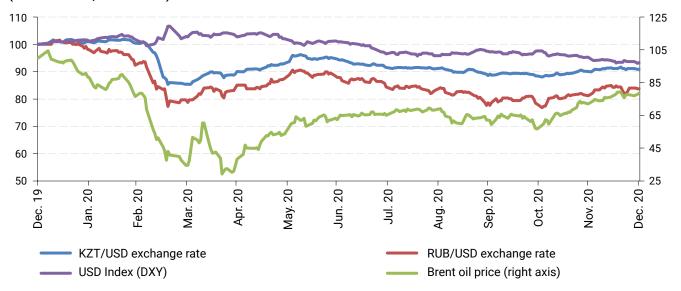
Moreover, the growing uncertainty among international investors led to the increase in demand for safe assets and appreciation of the US Dollar. This put a downward pressure on currencies of developing countries. As a result, the exchange rate of the tenge in March 2020 depreciated by 17% – from 382.6 to 448.5 tenge per 1 US Dollar.

In order to limit the destabilizing effect of external factors on the domestic foreign exchange market, the National Bank conducted currency interventions in the periods of high volatility. In February, due to the increasing volatility in the global financial markets caused by a massive spread of coronavirus worldwide, interventions of 94.8 million US dollars were conducted. The largest volume of interventions of 1 487.6 million US dollars was conducted in March 2020.

In March 2020, the Frankfurt trading method was activated in the foreign exchange market for the first time with an aim to mitigate the speculative pressure on the exchange rate.

Conversion operations of the National Fund's assets to carry out guaranteed transfers to the budget became an important factor for the foreign exchange market equilibrium of the demand and supply.

Figure 1.3.3.1 Movement of the Russian ruble and the tenge against the US Dollar, oil prices and USD Index (December 31, 2019 = 100)



The National Bank, jointly with the Government of the Republic of Kazakhstan, was ensuring coordination of operations of quasi-government companies in the foreign exchange market in order to even out distribution of foreign exchange operations and the intragroup netting to minimize the impact on the foreign exchange market. Efforts were also made to pursue quasi-government sector entities to transfer foreign currency deposits to bank accounts at banks.

In order to increase the supply of foreign currency in the foreign exchange market, in March 2020 a requirement for a mandatory sale of 50% of exports proceeds by the quasi-government sector entities was introduced. The measure taken helped increasing the supply of foreign exchange and improving the equilibrium of the foreign exchange market. In accordance with this requirement, over the year companies in the quasi-government sector had sold about 2.1 billion US dollars of foreign exchange proceeds.

With a view to ensure the appropriate level of transparency of foreign exchange operations, the National Bank made changes to the rules for conducting foreign exchange operations in respect of preliminary examinations of conversion operations by banks and control over the designated use of the purchased foreign exchange within the time frames prescribed by the law.

To reduce the speculative activity among the market participants, the limits for spreads between the purchase rate and the selling rate of currency for foreign exchange offices (on the US Dollar - 6 tenge, the Euro - 7 tenge) and limits for cash withdrawals in the tenge for business entities were set forth.

In the second quarter of 2020, based on the taken anti-crisis measures, the gradual ease of quarantine restrictions as well as the stabilization of external commodity and financial markets as a result of massive fiscal and monetary stimulus measures undertaken by the governments and central banks along with the achievement of agreement among OPEC+ countries, the situation in the local foreign exchange market also stabilized. The exchange rate of the tenge was appreciating: in June the exchange rate of the tenge was measuring up below 400 tenge per one US Dollar.

In September-October 2020, the domestic foreign exchange market was under the pressure due to concerns about the spreading of the second wave of coronavirus, the growth of uncertainty about the presidential elections in the USA; this put a downward pressure on oil quotes and currencies of developing countries and reduced the investor interest in risky assets.

In order to prevent excess volatility of the exchange rate, the National Bank in September and October, in exceptional periods of low liquidity conducted additional interventions of 231.9 and 91.3 million US dollars, respectively. However, the National Bank's participation did not affect the overall market dynamics.

In November-December 2020, given the rise in world oil prices and appreciation of currencies of developing countries, including the Russian ruble, amid positive news about successful testing of coronavirus vaccines, an additional economic stimulus package in the USA and the growing demand for risky assets on the part of global investors along with the tax period in the domestic market, the domestic currency appreciated from 432.64 to 420.71 tenge per one US Dollar.

The situation in foreign markets along with the measures taken allowed stabilizing the foreign exchange market and ensuring its normal functioning. At the end of the year, the tenge depreciated by 10.4% while currencies of emerging markets depreciated to a larger extent: the Brazilian real depreciated by 29.1%, the Turkish lira – by 25%, and the Russian ruble – by 19.5%.

In furtherance of the President's instruction and in order to increase confidence in the policy pursued, from the beginning of 2020 the National Bank, in addition to disclosure on interventions, proceeded with publication of information about the volumes of monthly conversions and transfers from the National Fund.

To increase transparency of the implemented exchange rate policy, the National Bank was pursuing an active communication policy. The work was carried out to explain the developments in the foreign exchange market, the main determinants of the exchange rate, the dynamics of international reserves and major flows in foreign currency.

1.3.4 DEPOSIT MARKET

During 2020, deposits of residents at depository organizations went up by 16.1%, amounting to 22.1 trillion tenge.

Over the year, deposits in the domestic currency increased by 28.0%, to 13.9 trillion tenge, foreign currency deposits grew up slightly by 0.4%, equaling 8.2 trillion tenge.

Efficiency of decisions on the base rate at the beginning of the pandemic resulted in the corresponding growth of interest rates on demand deposits dominating in the deposit structure, and on time deposits with maturities up to 6 months. This enabled to limit the danger of a fall in the demand for the tenge assets and to prevent excessive depreciation of the exchange rate. After a spike to 46.7% in March 2020, the deposit dollarization decreased to 37.3% by the end of the year, which was the lowest level since 2013 (Figure 1.3.4.1).

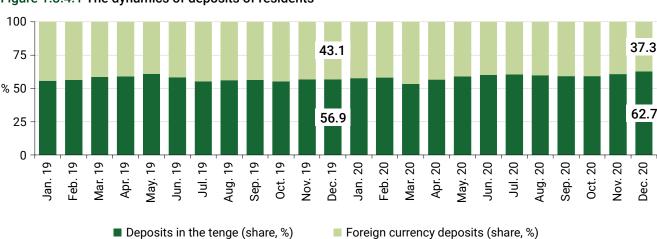
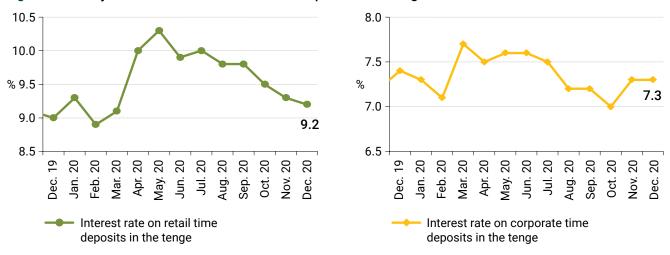


Figure 1.3.4.1 The dynamics of deposits of residents

During 2020, corporate deposits increased by 14.7%, to 11.3 trillion tenge. Within their structure, deposits in the domestic currency went up by 32.5%, to 7.2 trillion tenge, while foreign currency deposits decreased by 7.2%, to 4.1 trillion tenge. As a result, dollarization of corporate deposits accounted for 36.2% (in December 2019 – 44.8%).

Retail deposits grew by 17.7%, to 10.8 trillion tenge, including deposits in the tenge – by 23.6%, to 6.7 trillion tenge, and foreign currency deposits – by 9.3%, to 4.1 trillion tenge. Dollarization of retail deposits was 38.4% (in December 2019 – 41.3%).

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



In December 2020, the weighted average interest rate on time deposits of non-bank corporate entities in the domestic currency accounted for 7.3% (in December 2019 – 7.4%), and on time retail deposits in the domestic currency – 9.2% (9.0%) (Figure 1.3.4.2).

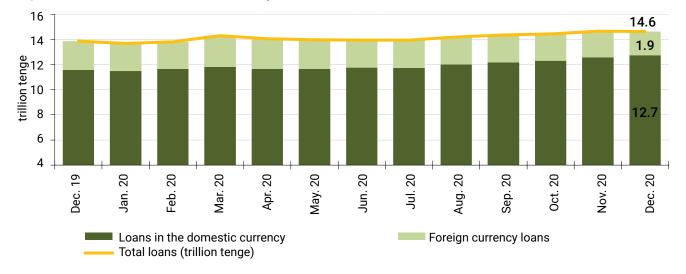
1.3.5 CREDIT MARKET

During 2020, bank credits the economy increased by 5.5%, amounting to 14.6 trillion tenge.

Long-term lending in 2020 went up by 5.7%, to 12.5 trillion tenge, and short-term lending – by 4.3%, to 2.1 trillion tenge. The share of long-term credits in the structure of bank loan portfolio accounted for 85.4% (in December 2019 - 85.3%).

During 2020, loans in the domestic currency increased by 10.1%, to 12.7 trillion tenge, whereas foreign currency loans went down by 17.7%, to 1.9 trillion tenge (Figure 1.3.5.1). As a result, during 2020 the relative share of loans in the tenge within the total lending volume increased from 83.4% to 87.0%.

Figure 1.3.5.1 Bank credits to the economy

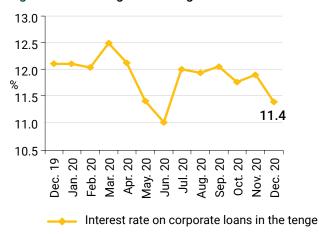


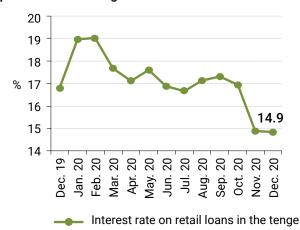
In 2020, retail loans continued to grow. The annual growth of retail loan portfolio accounted for 13.0%, reaching 7.5 trillion tenge. The relative share of retail loans increased from 48.0% to 51.5%.

In 2020, loans to non-bank corporate entities decreased by 1.5%, to 7.1 trillion tenge in connection with a takeover of non-performing assets by the distressed asset management company as part of the effort on improving the portfolio quality of the "ATF Bank" JSC. In the industry-based breakdown, the largest amount of bank credits to the economy fall on the industry -13.6%, trade -11.7%, construction -4.5%, transport -3.3%, and agriculture -1.6%.

Over the year, loans to small businesses had gone up by 19.3%, to 2 515.3 billion tenge, including long-term loans – by 16.5% to 2 066.2 billion tenge, and short-term loans – by 34.2% to 449.1 billion tenge.

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





In 2020, the weighted average interest rate on loans provided in the domestic currency to non-bank corporate entities went down to 11.8% from 12.0% in 2019, and the rate on retail loans – to 16.9% from 18.0% in 2019 (Figure 1.3.5.2).

1 4 PROMOTING FINANCIAL STABILITY

In 2020, the National Bank's policy on promoting financial stability was formulated in the environment of heightened risks resulting from long-acting restriction measures as a consequence of spreading coronavirus infection, and the growing instability in the financial and commodity markets. After the transfer of its mandate for regulation and supervision of the financial market to the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market from 2020, the National Bank monitors and assesses systemic risks in the financial system, elaborates and implements the measures for their mitigation, including in collaboration with the stakeholder government agencies.

In the period of spreading coronavirus infection and realization of appropriate restriction measures with a view to prevent a lingering episode of an economic downturn, the Government of the Republic of Kazakhstan, the National Bank and the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market have jointly adopted a broad set of measures for supporting the paying capacity of the population and the small and medium-sized business. In particular, measures for maintaining a stable functioning of the financial system were oriented at both bank borrowers and banks themselves.

The support measures for borrowers in the period of quarantine restrictions in the first instance were intended to avoid the buildup of existing liabilities of borrowers to banks and to facilitate the loan repayment on terms that are more favorable. Such measures included bank loan deferrals of up to 3 months, suspension of interest accruals on overdue loans and accruals of penalties/ fines on overdue payments of those borrowers who suffered as a result of the state of emergency.

Given the dynamics of the spreading coronavirus infection, the support measures were prolongated and expanded in respect of the delays in loan payments for the period sufficient to restore creditworthiness of the small- and medium-sized businesses and to refinance loans on favorable terms within the framework of government business support programs and own programs of banks.

With an aim to reduce the pressure of prudential requirements on lending to the economy during the lockdown, the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market and the National Bank, for the duration of pandemic with a subsequent prolongation of individual measures until July 1, 2021, reduced the capital buffers (countercyclical, conservation, systemic); in the course of provisioning, requirements to the classification of loans for which the deferral of payments was provided had been eased; also, other relieves in prudential requirements were realized in the form of reduction of risk-weighting ratios, liquidity requirements including the submission of mandatory reports about the bank's operations.

In addition, given the delegated mandate for regulation of the financial market, in May 2020 the National Bank and the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market passed a joint resolution "On Approval of the Rules for Lending of Last Resort Provided by the National Bank of the Republic of Kazakhstan". This mechanism makes it possible for solvent banks to receive emergency liquidity assistance against the pledge of good quality assets for preventing the realization of systemic risk in the financial system in case of the run on deposits.

With a view to perform a comprehensive assessment of financial condition of banks in Kazakhstan and to implement the improvement measures where necessary, in 2020 the National Bank, in collaboration with the Agency of the Republic of Kazakhstan for

Regulation and Development of Financial Market, completed the independent asset quality review, which showed that there is no capital deficit at the system level and at the level of individual banks participating in the asset quality review. An independent asset quality review of Kazakhstan's banking sector allowed assessing a real status of the bank asset quality and analyzing the existing bank practices in lending and risk management. This, in turn, enabled to increase transparency of the banking sector in Kazakhstan and to begin a comprehensive transformation of business processes in banks including the improvement of quality of risk management and processes of calculation of bank provisions and capital.

Additionally, in order to assess the intensity with which the crisis associated with the spreading of coronavirus affected the banking sector soundness, the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market, jointly with the National Bank, conducted a supervisory stresstesting of banks based on the European Central Bank's methodology, performed the analysis of historical dynamics of bank financial performance and also evaluated the sustainability of business models in terms of the banks' ability to manage their risks effectively and to ensure an adequate level of profitability and liquidity. Based on the results of stress testing, banks that were classified as banks with moderate and high risks by the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market, by the end of January 2021 had to design individual strategies for ensuring financial soundness in order to minimize risks in the financial system in case of realization of macroeconomic shocks to increase sustainability of the business models.

In the course of asset quality review, banks had already implemented some of measures on improvement of their asset portfolio quality (creating additional provisions, repaying the borrower debt, taking additional loan collaterals), which allowed improving the asset quality in the banking system. So, as at January 1, 2021, the percentage of loans in the loan portfolio that are more than 90 days past due was 7.1%. Along with that, the percentage of loans in the loan portfolio with a significant increase in credit risk (the second stage of impairment under the International Financial Reporting Standard) accounted for 3.6% (6.1% – in August 2020⁶), and the percentage of impaired loans (the third stage of impairment) – 14.4% (17.7% – in August 2020).

⁶ The period when banks started to submit the relevant reporting form.

The corporate loan portfolio whose growth in 2020 accounted for 0.2% amounting to $8\,085.0$ billion tenge is still exposed to the credit risk growth to the largest extent. As at January 1, 2021, the percentage of loans in this portfolio that are more than 90 days past due was 4.6%. The percentage of loans in the loan portfolio with a significant increase in credit risk (the second stage of impairment) accounted for 4.8% (2.6%), and the percentage of impaired loans (the third stage of impairment) – 19.6% (13.8%).

A low level of solvency of corporate borrowers, particularly insufficient operating efficiency, and a limited level of owners' equity, liquidity and collateral base limits the expansion of corporate lending despite the fact that banks have generated a sufficient level of liquidity.

At the same time, due to the decreasing income of the population given the coronavirus pandemic, the risk that the retail segment of lending, specifically consumer lending, would overheat, is going down. The growth in the retail loan portfolio of banks at January 1, 2021, made up 13.0%, amounting to 7 124.8 billion tenge versus 27% in 2019, or 6 329.4 billion tenge. At the same time, consumer loans increased by 3.4% versus 24.2%. In turn, government housing programs for the population helped building up the mortgage loan portfolio of banks. So, during 2020 the growth of the mortgage loan portfolio accounted for 32.8% (2019 – 33.8%), amounting to 2 363.1 billion tenge.

The asset quality in the retail segment as compared to the corporate portfolio is higher but it also retains the downside risks because of a lasting effect of the coronavirus crisis. At January 1, 2021, the percentage of loans in the retail portfolio that are more than 90 days past due was 5.4%. The percentage of loans in the loan portfolio with a significant increase in credit risk (the second stage of impairment) accounted for 5.9% (3.5%), and the percentage of impaired loans (the third stage of impairment) – 8.6% (3.9%).

At the same time, the worldwide quarantine measures in response to the outspreading coronavirus pandemic

had a significant impact on the upturn in the banking system risks. Efficiency and the scale of anti-crisis measures taken by the government enabled to curb the accumulation of systemic risks and prevent their realization. However, the effect of reduced creditworthiness of bank borrowers on the quality of bank assets after the pandemic may be long-standing.

In 2020, due to the spreading of COVID-19 pandemic and imposition of quarantine measures, there is a probability that liquidity risks in the banking sector of the country would grow. However, the support measures taken by the Government, National Bank and the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market enabled to offset them; for which reason, banks in Kazakhstan had a sizable reserve of liquid assets throughout the year. At end-2020, liquidity surplus of banks remained at a stable level: highly liquid assets of banks amounted to 12.7 trillion tenge (highly liquid assets without encumbered securities and excluding closing entries), having increased by 37.9% as compared to 2019 and equaling in sum to 40.6% of total assets. The main contribution to expansion in the total volume of highly liquid assets was made by the growing volumes of foreign currency liquidity (25.9% out of 37.9%). The National Bank continues to withdraw excess liquidity in the banking sector by maintaining interest rates within the target range.

In the finding structure, the percentage of customer deposits remained high. At end-2020, deposits accounted for 78.5% of total liabilities of the banking sector. Risks of the deposit portfolio concentration are persisting: during 2020, the share of 25 largest creditors went up from 49.5% to 68.3% (excluding closing entries). In 2020, dollarization of bank deposits continues to decrease. In 2020, the share of effectively time deposits in the retail segment continued to grow as a result of joint actions of the National Bank and the Kazakhstan Deposit Insurance Fund. Formation of a sound market of time deposits remains a relevant objective for the National Bank, since the actual deposit maturity is still generally low.

The Financial Stability Council of Kazakhstan. Within the scope of implementing the anti-crisis policy and promoting financial stability under the impact of external shocks on the economy, five sessions of the Financial Stability Council of the Republic of Kazakhstan were held in 2020.

The sessions addressed the issues of macroeconomic nature aimed at assessing the effect of the COVID-19 epidemic on financial sustainability and economic development of Kazakhstan, financing of anti-crisis

measures and the macroeconomic development scenarios for 2020–2021. In addition, in promoting the financial system stability, new procedures for lending of last resort and the framework for additional assessments to the Kazakhstan Deposit Insurance Fund as the method of rehabilitation of the retail deposit market were approved. Based on the results of the asset quality review and outcomes of the bank viability analysis, the comprehensive measures aimed at increasing financial soundness of the banking sector and reducing systemic risks were approved.





2.1 PAYMENT SYSTEM DEVELOPMENT

The payment systems development is crucial for ensuring effective servicing of the country's financial system and functioning of the real sector of the economy.

Global trends and technological changes require new standards of services in the sphere of payments. The market participants are intensively implementing new digital services on the basis of innovation technologies. Mobile applications, Internet banking and other remote facilities are becoming the main channel for providing payment services to end users worldwide.

In 2020, the work on increasing the quality and expanding the payment services of migration to remote facilities offered to the clients was continued; this allowed maintaining the growth trends in the volumes of noncash payments and money transfers.

With an aim to identify key areas and implement the systemic measures for further development of the payment market, the National Bank adopted the Program for Development of the National Payment System until 2025. The Program envisages the implementation of infrastructure decisions in the national payment system (establishing and developing the instant payments system, organizing the local infrastructure for processing payment card operations, designing a remote customer identification service) and measures aimed at standardization and operational interaction among the market participants (unification of the QR-code format, transition to the format of the international financial messaging standard ISO 20022, development of Open API and Open Banking services).

In 2020, amendments were made to the legislation of the Republic of Kazakhstan with a view to improve regulation of payment organizations and payment systems that minimize the risks of using the services of non-bank payment organizations for illicit transactions including the money laundering. Plus, for the purposes of establishing a legal framework for organizing the instant payments system, opening up opportunities for social transfers in the form of electronic money, for participation of non-bank institutions – payment organizations in the instant payments system and implementation of payment solutions providing for the use of new payment

instruments on the basis of a mobile telephone number, QR-code and other identifiers (IIN, BIN).

In October 2020, a remote identification mechanism was put into commercial operation to ensure a remote customer identification by financial and other institutions. The operational launch of the service in the pilot mode in April 2020 enabled banks to open accounts to individuals remotely, also for receiving social payments in the period of pandemic. The service is used by 14 banks and 9 non-bank organizations; more than 4.4 million client identification services had been provided.

2.1.1 PAYMENT SYSTEMS

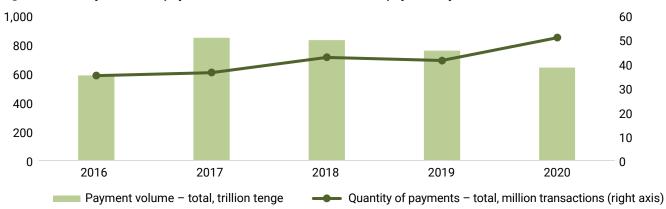
Eighteen payment systems are functioning within the territory of the Republic of Kazakhstan, of which the Interbank System of Money Transfers and the Interbank Clearing System belong to the National Bank. The National Bank's payment systems are oriented at payments in the domestic currency within the territory of the Republic of Kazakhstan and process 92% 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.

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 2020 they equaled 99.99% on the Interbank System of Money Transfers and 99.99% on the Interbank Clearing System, on average.

The volumes of payments processed through the National Bank's payment systems in 2020 equaled 51.1 million transactions totaling 645.5 trillion tenge (Figure 2.1.1.1). As compared to 2019, the quantity of payments in the payment systems increased by 22.8% (by 9.5 million transactions), and the payment amount decreased by 15.3% (by 116.6 trillion tenge). On average, 207.7 thousand transactions totaling 2 624 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 end-2020, 38 financial organizations, including all infrastructure entities of the financial market were the members of the Interbank System of Money Transfers. In 2020, 15.0 million payments amounting to 638.1 trillion tenge were processed through the system. As compared to 2019, the volume of payments went down by 15.5% (by 116.9 trillion tenge), and the quantity of electronic payment messages processed through the system increased by 3.4% (by 0.5 million transactions). Reduction in the volume of payments processed through the Interbank System of Money Transfers is related to the decreased amounts of payments on interbank operations with deposits (by 12.8%) and operations with securities of Kazakhstani residents (by 14.7%).

An average amount of one payment in the Interbank System of Money Transfers in 2020 equaled 42.5 million tenge and decreased by 18.3% as compared to 2019 (by 9.5 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 (82.2%), and the bulk of payments in terms of volume – payments above 1 billion tenge (the share – 84.1%).

The system mainly processed payments on securities operations of Kazakhstani residents (50.5% of the total volume of payments), interbank operations with short-term deposits (28.7%) and on operations with foreign exchange and precious metals (7.6%). In 2020, the volume of payments for goods and services accounted for 6.5% of the total volume of payments processed in the system.

Interbank Clearing System

At end-2020, 26 financial organizations were the members of the Interbank Clearing System. In 2020, 36.1 million electronic payment messages of 7.4 trillion tenge were processed through the system. As compared to 2019, the quantity of payment messages in the clearing system went up by 33.1% (by 8 976.8 thousand documents), and the amount of one payment in the Interbank Clearing System in 2020 was 262.1 thousand tenge, having increased by 27.5% as compared to 2019 (by 56.5 thousand tenge). The largest share in terms of the quantity of transactions in the Interbank Clearing System is among payments of up to 500 thousand tenge (89.5%), and the major portion in terms of the amount of payments – among electronic payment messages with the amount of above 1 million tenge (the share - 82.8%).

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 28.5%) and provided services (the share – 25.2%); along with that, payments to the budget and payouts from the budget made up 13.9% of the total volume of payments.

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-2020, 7 international remittance systems have been functioning within the territory of Kazakhstan: the Gold Crown, Western Union, UniStream, Contact, Faster, MoneyGram, and UPT.

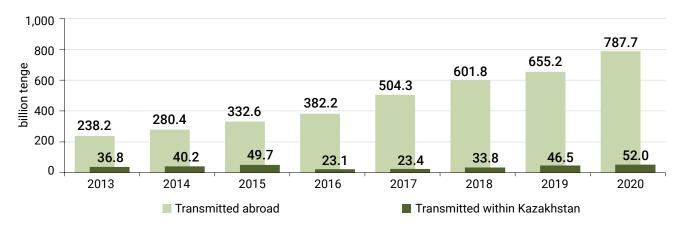
At the end of 2020, the volume of money transmitted abroad via international remittance systems made up 787.7 billion tenge, having increased by 20.2% as compared to the previous year. The average amount of one transfer abroad was 330.4 thousand tenge.

As before, the largest recipients of money transfers in 2020 are such countries as Russia (27.1%), Kyrgyzstan (21.0%), Uzbekistan (19.5%) and Turkey (17.4%). In aggregate, 85.1% of the overall volume of money transfers abroad were transmitted to these countries.

During the same period, 286.9 billion tenge were transmitted to Kazakhstan from abroad, which is by 16.8% less than in 2019. The average amount of one transfer from abroad was 224.8 thousand tenge.

Transfers totaling 52.0 billion tenge were made across Kazakhstan via international remittances (the average amount of one transfer is 87.4 thousand tenge). As compared to 2019, the growth in the volume of transfers across Kazakhstan transmitted via such systems accounted for 11.9% (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 end-2020, 47.9 million payment cards were circulating in the country (the annual growth of 49.7%),

of which – 35.6 million debit cards, 10.9 million credit cards, about 1.2 million debit cards with a credit limit, and about 0.2 million pre-paid cards. In Kazakhstan, 21 banks and the "KazPost" JSC are issuing payment cards; 71% cards in circulation are the cards of international payment systems: Visa International, MasterCard, American Express International, UnionPay International (Figure 2.1.2.1).

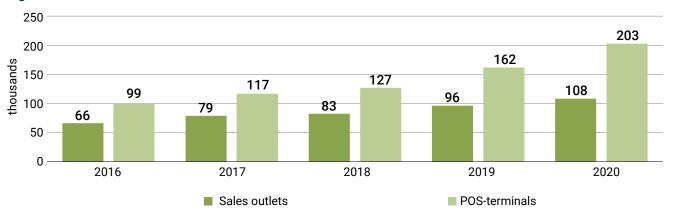
Figure 2.1.2.1 Share of payment cards of international payment systems in the total volume of cards in circulation



As the quantity of payment cards is increasing, the network of banking devices for payments and money transfers with their use is expanding. At end-2020, 12 728 ATMs were functioning within the territory of the Republic of Kazakhstan, 48.5% of which are ATMs

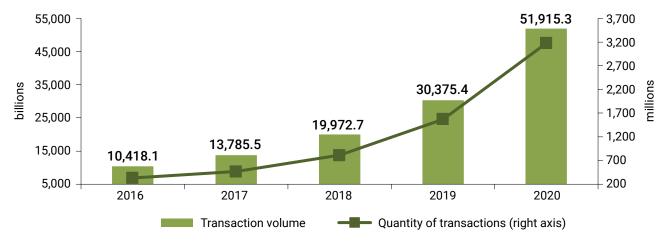
with the Cash-in function; there were 108 159 sales outlets accepting payment cards (a 12.2% growth as compared to 2019); and 202 979 POS-terminals were installed (a 26.3% growth as compared to 2019) at 169 886 retail outlets (Figure 2.1.2.2).

Figure 2.1.2.2 POS-terminals at sales outlets



During 2020, 3.2 billion transactions were conducted with the use of payment cards of Kazakhstani issuers (a two-fold growth as compared to 2019) in the amount of 51.9 trillion tenge (a 71% growth since 2019) (Figure 2.1.2.3).

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

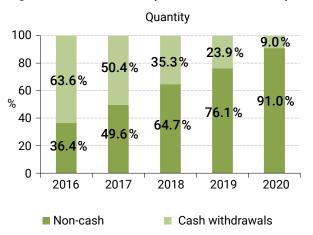


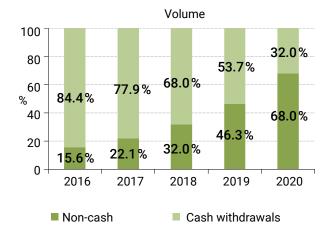
As a result of collaboration of the National Bank with the international payment systems Visa, MasterCard and with banks, from May 1, 2020, the amount of interbank fee on payment cards was reduced for certain segments of the economy by 2 times (to 1%) and of the trade acquiring fee – by 30-40% on average (to 1.5%). The fee was reduced for those activities, which have a social significance: education, healthcare and pharmaceutical

services, purchase/sale of real estate, payment for using toll roads, parking lots, and agricultural services.

The COVID-19 pandemic made its adjustments into habits of the population and led to the rise in non-cash operations and online purchases, which is proved by the decreased percentage of cash withdrawals (Figure 2.1.2.4).

Figure 2.1.2.4 Share of operations in the total quantity, by type of operations, %

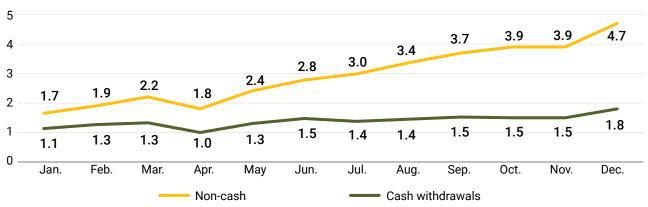




In 2020, the overall quantity and volume of non-cash operations with the use of payment cards increased by 2.4 and 2.5 times, respectively, and amounted to 2.9 billion transactions of 35.3 trillion tenge.

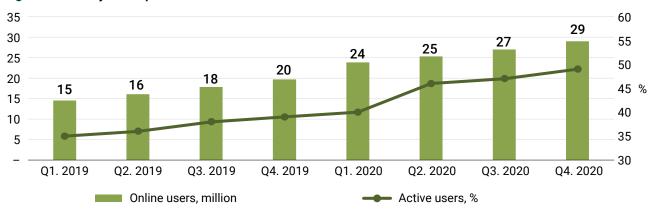
In 2020, the quantity of operations on cash withdrawals from payment cards went down by 21% and equaled 297 million operations. During 2020 as a whole, payment cardholders cashed out 16.6 trillion tenge (Figure 2.1.2.5).

Figure 2.1.2.5 Dynamics of operations with the use of payment cards in 2020, in trillion tenge



From the beginning of the year, the activity in using bank online channels increased by 46% (Figure 2.1.2.6). At end-2020, 28.7 million users were registered in these systems, 14 million of which are active users.

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

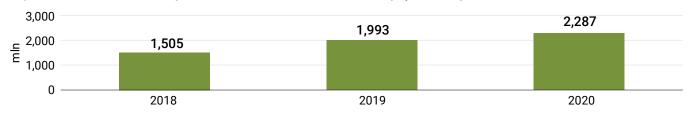


Payment Services of Payment Organizations

At end-2020, the National Bank registered 70 payment organizations, which have the right to provide certain types of payment services to customers (payment via POS-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).

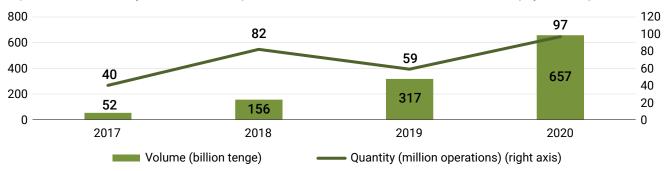
At the end of 2020, the quantity of transactions processed through the services of payment organizations decreased by 7% and made up 430.1 million transactions of 2.3 trillion tenge (the annual growth of 15%) (Figure 2.1.2.7), 64.5% of which amounting to 1.5 trillion tenge were conducted to pay for the services of the cellular mobile operators having exceeded the performance in the same period of 2019 by 26.4%.

Figure 2.1.2.7 Volumes of operations conducted via services of payment organizations, in 2020



In 2020 as compared to 2019, the quantity and volume of operations initiated by customers online had doubled in terms of the amount (656,6 billion tenge) and increased by 1.5 times in terms of quantity of operations (to 97 million operations) (Figure 2.1.2.8).

Figure 2.1.2.8 Quantity and volume of operations conducted online via the services of payment organizations



In 2020, payment organizations acted as operators of 24 systems of electronic money. The volume of operations with the use of electronic money made up 323.9 billion tenge, and the quantity of conducted operations – 149.9 million. Thus, the volume of operations conducted in favor of corporate entities and individual entrepreneurs

amounted to 280.8 billion tenge, which accounts for 86.8% of the total volume of operations with the use of electronic money, and the quantity of operations reached 141.8 million, accounting for 94.6% of the total volume of operations with the electronic money.

2.2 CASH CIRCULATION

2.2.1 CASH ISSUANCE AND CIRCULATION

In total, 6.6 trillion tenge of cash was issued into circulation from the National Bank's reserve funds during 2020, which exceeds the corresponding indicator for

2019 by 785.6 billion tenge, or by 13.4%. The volume of cash withdrawn from circulation increased as compared to 2019 by 292.9 billion tenge, or by 5.1%, and amounted to 6.1 trillion tenge. As compared to the beginning of 2020 (2.7 trillion tenge), the amount of cash in circulation

went up by 562.1 billion tenge, or by 20.9%, and equaled 3.3 trillion tenge at end-2020 (Figure 2.2.1.1).

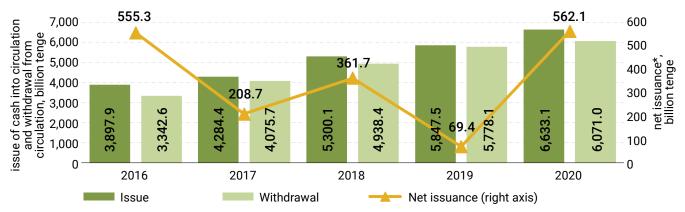
Figure 2.2.1.1 Cash in circulation



The increase in net issuance in 2020 (Figure 2.2.1.2) was driven by lower volume of cash received from banks in the period of the state of emergency associated with restrictions in respect of operations of business entities and the provided opportunity to defer the loan payments

for corporate entities and individuals, as well as with payouts in the amount of one minimum wage from the Government Social Insurance Fund to the people of Kazakhstan in connection with the loss of income in the environment of pandemic.

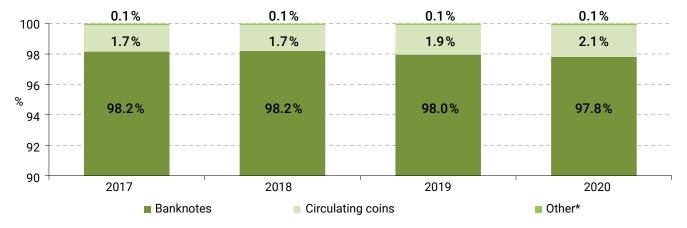
Figure 2.2.1.2 Issue of cash into circulation and its withdrawal from circulation



^{*} difference between the issue and withdrawal of cash from circulation

Banknotes of the domestic currency account for the largest portion of cash in circulation. At end-2020, banknotes in circulation amounted to 3.2 trillion tenge, or 98% of the total amount of cash in circulation. The amount of circulating coins was 69.4 billion tenge or 2% 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



^{*} Collectible and investment coins as well as cash withdrawn from 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 24 banknotes. On average, over the last five years the annual growth rate of circulating coins per capita accounted for 8%. At end-2020, the quantity of circulating coins per capita was 183 pieces (Figure 2.2.1.4). At the end of 2020, given

the overall issuance of circulating coins for 17.7 billion tenge, the amount of coins withdrawn from circulation was 0.6 billion tenge, or 3% of the total amount issued. Based on the existing demand, the National Bank ensures that the need for circulating coins is satisfied without interruption and takes measures to saturate the economy with circulating coins.

Quantity of banknotes, pieces 180 <u>ຂໍ້ເ</u> 160 <u>ເ</u> 140 ₽ Banknotes Circulating coins

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 departments of the National Bank's branches has been 93% (Figure 2.2.1.5).

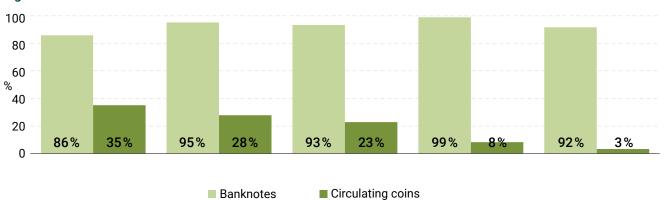


Figure 2.2.1.5 Ratio of the withdrawn amount to the issuance

One of the reasons for the increase in issuance volumes of cash in circulation is the growth in the average nominal income per capita in 2020. As compared to 2019, average per capita nominal money income went up by 94.9 thousand tenge, or $7.6\,\%^7$ in 2020.

In 2020 as compared to 2019, banks disbursed more cash for purchasing foreign exchange – by 11.2%, and to support ATMs – by 4.4% (Table 2.2.1.1).

⁷ According to the preliminary data from the Bureau of National Statisctis of the Agency for Strategic Planning and Reforms Republic of Kazakhstan for 2020

Table 2.2.1.1 Cash circulation in banks8

Cash Flows through Cash Desks of Banks	In 2020	In 2019	Change for the Period		
	(billion tenge)	(billion tenge)	billion tenge	%	
Receipts to bank cash desks	31 122.3	30 671.4	450.9	1.5	
from sale of goods, services and works by corporate entities	5 747.1	6 236.3	-489.2	-7.8	
to deposit accounts of individuals	7 986.8	9 446.0	-1 459.2	-15.4	
from foreign exchange sales	4 641.8	4 769.4	-127.6	-2.7	
from individuals on one-time transfers	240.0	279.9	-40.0	-14.3	
loan repayments from individuals and corporate entities	443.9	462.3	-18.4	-4.0	
other receipts	12 062.8	9 477.5	2 585.3	27.3	
Withdrawals from bank cash desks	31 714.4	31 998.4	-284.1	-0.9	
loan repayments from individuals and corporate entities	1 738.5	2 759.8	-1 021.3	-37.0	
from deposit accounts of individuals	7 072.8	6 976.6	96.3	1.4	
for foreign exchange purchase	1 544.4	1 388.4	155.9	11.2	
for one-time transfer	79.2	87.0	-7.8	-8.9	
for payments of wages, retirement benefits and allowances	915.5	1 486.5	-571.0	-38.4	
to support ATMs	17 708.3	16 965.4	742.9	4.4	
loans to individuals and corporate entities	311.2	511.2	-200.0	-39.1	
other withdrawals	2 344.5	1 823.6	520.9	28.6	

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

With an aim to expand the volumes of non-cash payments, increase transparency of operations conducted by business entities and to reduce the shadow economy, the National Bank, jointly with the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market and the Ministry of Finance of the Republic of Kazakhstan, took measures on regulation of maximum amounts of cash withdrawals from bank accounts of business entities

In accordance with the taken measures, maximum amounts of cash withdrawals from bank accounts of business entities had been determined (for the small business entities – 20 million tenge, for the medium-sized business – 120 million tenge, for the large business – 150 million tenge): from June 1, 2020 – for corporate entities, from January 1, 2021 – for corporate entities and individual entrepreneurs.

From the time when the maximum limits had been set (from June through December 2020), corporate entities withdrew cash⁹ totaling 1 096.6 billion tenge, which is by 680.7 billion tenge, or by 38.3% less than in the same period of 2019 (1 777.3 billion tenge) (the average monthly withdrawal for the period amounted to: in

2020 – 156.7 billion tenge, in 2019 – 253.9 billion tenge). Along with that, the amount of cash withdrawals exceeding the prescribed maximum amounts equaled 85.3 billion tenge, or 7.8% of the total amount. The taken measures showed their effectiveness and helped reducing the volumes of the used cash and increasing the transparency of operations conducted by business entities.

2.2.2 BANKNOTES AND COINS

On January 28, 2020, the National Bank issued circulating coins with a nominal value of 200 tenge.

The issuance of coins with a nominal value of 200 tenge was stipulated by their wear resistance and durability as compared to banknotes of this denomination. The average life of banknotes with a nominal value of 200 tenge does not exceed one year and that of coins is more than 10-15 years. Coins with a nominal value of 200 tenge just as all circulating coins of the domestic currency are made from base metals and their design is implemented taking account of the convenience for the people in making payments.

At end-2020, the share of circulating coins with a nominal value of 200 tenge accounted for 10.8% of the total amount of coins in circulation. The largest amounts of

⁸ According to the data in the statistical form on departmental statistical observation of the "Statement of Cash Turnovers (Cash Turnovers) of Banks and Organizations Engaged in Certain Types of Banking Operations" as approved by the Order of the Acting Chairperson of the Agency of the Republic of Kazakhstan on Statistics dated December 21, 2010 No. 351

⁹ For payment of goods, services and delivered works according to the data in the statistical form on departmental statistical observation of the "Statement of Cash Turnovers (Cash Turnovers) of Banks and Organizations Engaged in Certain Types of Banking Operations" as approved by the Order of the Acting Chairperson of the Agency of the Republic of Kazakhstan on Statistics dated December 21, 2010 No. 351

their net issue into circulation are in the city of Almaty (29.1%), Karaganda Region (9.0%), the city of Shymkent and Turkistan Region (8.4%).

Collectible Coins

In 2020, the first coin program, "JETI QAZYNA" ("Treasures of the Steppe" series) was implemented, whereby collectible and bi-color circulating coins were issued into circulation.

In 2020, 816 300 pieces of collectible coins from precious metals and base metals were minted and issued: 2 types of coins from gold of the proof standard,

8 types of coins from silver of the proof standard, 1 type of coins from silver of the black proof standard (this technology is used for the first time in the production of Kazakhstan coins), 1 type of bi-color coins from silver with tantalum insert, 11 types of coins from Melchior alloy, 8 types of coins from nickel silver alloy, and 7 types of bi-color collectible coins.

Forensic Analysis of Banknotes and Coins

During 2020, the National Bank conducted forensic analysis of 2 207 suspicious currency notes for tenge (2 203 banknotes and 4 coins) (Table 2.2.2.1).

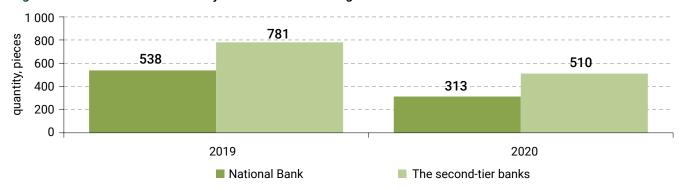
Table 2.2.2.1 Forensic analysis of suspicious currency notes for 2019–2020

Forensic analysis of suspicious currency notes	in 20	19	in 2020		
	quantity, pieces	amount, tenge	quantity, pieces	amount, tenge	
Recognized as counterfeit	538	2 513 600	313	1 230 700	
Recognized as invalid	856	1 377 400	824	1 756 400	
Recognized as having production defect	7	96 000	1	20 000	
Recognized as valid and exchangeable	3 260	19 942 800	1 069	6 192 900	
Total	4 661	23 929 800	2 207	9 200 000	

During 2020, the National Bank and banks had detected 823 counterfeit currency notes in the amount of 2 892 800 tenge, including 819 banknotes and 4 coins (Figure 2.2.2.1). In 2020, the quantity of counterfeit currency notes decreased by 38% as compared to 2019. The analysis of the quantity of counterfeit currency notes

by denomination and years of issuance showed that in 2020 the banknotes with the following face value were forged most times: with a face value of 2000 tenge -350 notes (42.5% of the total quantity of detected counterfeit banknotes), 5000 tenge -310 notes (37.6%), and 10000 tenge -58 notes (7%) (Figure 2.2.2.2).

Figure 2.2.2.1 Counterfeit currency notes detected during 2019-2020



During 2020, the largest quantity of counterfeit banknotes was detected in the city of Almaty – 554 banknotes, or 67% of the total quantity of detected counterfeit banknotes. In other regions, there were 269 counterfiet banknotes or 33% of the total quantity of detected forged notes. As at end-2020, there were

approximately 1.5-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).

450 420 395 400 350 350 310 283 300 250 200 129 150 100 56 58 49 36 32 50 13 0 0 50 100 500 2,000 5,000 10,000 20,000 200 1,000 tenge tenge tenge tenge tenge tenge tenge tenge tenge 2019 2020

Figure 2.2.2.2 Counterfeit currency notes detected during 2019-2020, by denomination

2.2.3 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, Ban CenterCredit) and the organizations authorized to conduct operations with foreign cash (exchange offices).

In 2020, banks and non-bank exchange offices had realized 21 099 of minted bars with the total weight of 890 kilograms, which is a 34% increase.

Gold bars are presented in five categories: 5, 10, 20, 50 and 100 grams. In 2020, the most popular gold bars among the buyers were the bars with the weight of 100 grams (the share of the total volume of sales in 2020 is 28%), followed by 20-gram bars (27%) and 10-gram bars (24%), 50- gram bars (12%), and 5-gram bars (9%). 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, 42 579 gold bars with a total weight of 1.57 ton were sold, 131 minted bars with a total weight of 3.4 kilograms were repurchased. This is related to the fact that gold bars are a long-term instrument for investment and savings.

2.3 CURRENCY EXCHANGE REGULATION AND CURRENCY CONTROL

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

In 2020, amendments were made to the procedure for engaging in foreign exchange operations in the Republic of Kazakhstan. According to these amendments, the threshold amount, which requires a foreign exchange contract when purchasing foreign exchange was lowered; the repurchase requirement was introduced regarding foreign exchange, which was purchased but not used as designated within the defined timeframes; the documents that should be presented when conducting foreign exchange operations were specified.

An off-site supervision of banks is conducted on a weekly basis in order to monitor whether they comply with the introduced requirement about a repurchase of foreign exchange as appropriate.

In executing the instruction to continue with the practice of selling a part of their foreign exchange proceeds by the quasi-government sector entities, the National Bank took part in the elaboration of the draft decree of the Government of the Republic of Kazakhstan "Regarding Some Aspects of Activities of the Quasi-Government Sector Entities" ("the Decree"). Later, it participated in drafting the amendments to the Resolution on a number of issues including its prolongation. The algorithm of banks' operation in ensuring the sale of foreign exchange proceeds by the quasi-government sector entities was designed and forwarded to the authorized banks, along with the amendments to the Resolution and its further monitoring.

With an aim to monitor whether banks and the quasi-government sector entities comply with the requirements of the Resolution and the algorithm as appropriate, off-site supervision of banks was conducted on a daily and weekly basis. The National Bank, in collaboration with the Ministry of National Economy of the Republic of Kazakhstan, made an effort to detect and eliminate breaches of requirements set forth in the Resolution by the quasi-government sector entities.

In 2020, as part of the record registration of foreign exchange contracts regarding capital movements and notifications about accounts at foreign banks, 1486 record numbers had been assigned.

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 repatriation should be carried out is determined by the terms and conditions of a foreign exchange contract on exports or imports.

In 2020, record numbers had been assigned to 69 408 foreign exchange contracts on exports or imports, of which: on exports – 18 899, on imports – 50 509, including 13 716 foreign exchange contracts whose terms and conditions provide for delivery of works and provision of services, thus representing a 33% contraction in coverage as compared to 2019.

In 2020, as part of the currency exchange control, the National Bank detected administrative offense in the area of currency exchange legislation and initiated 881 cases of administrative offense, where:

- reprimands were administered on 801 cases, of which warnings were issued on 607 cases, and the amount of penalties on 194 cases imposed by the National Bank (103) and courts (91 cases) was about 438.0 million tenge;
- 2) the proceedings were terminated on 55 cases;
- 3) 25 cases are under consideration.

In addition, in 2020, in collaboration with the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market, there were unscheduled inspections of the authorized banks and 1 357 documentary inspections were conducted, which resulted in 51 warning reports; administrative sanctions in the form of penalties were imposed totaling over 412 million tenge.

With an aim to conduct independent risk-based inspections of the authorized banks, the "Procedure for Establishing the Risk Assessment in Order to Conduct Inspections of the Authorized Banks by the National Bank of the Republic of Kazakhstan in the Area of Currency Exchange Regulation and Currency Control" was prepared and approved by the Order of the National Bank's Governor.

In 2021, the National Bank will continue to elaborate measures required to intensify effectiveness of the currency control and counteract the capital removal from the country, by collecting and analyzing the data obtained within the framework of currency exchange legislation of the Republic of Kazakhstan and by analyzing doubtful foreign exchange operations.

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

Pursuant to the existing legislation in the field of currency exchange regulation, a license of the National Bank is only required for activities related to organization of exchange operations with foreign cash (activities of exchange offices).

In 2020, as part of licensing of activities related to exchange operations with foreign cash, 33 licenses to new authorized organizations (non-bank corporate entities) were issued, and 185 licenses were surrendered on a voluntary basis. At the end of 2020, 311 authorized organizations had valid licenses for organization of exchange operations with foreign cash, 2 247 exchange offices including 1 577 bank exchange offices, 437 exchange offices of authorized organizations and 233 exchange offices of the "KazPost" JSC were operating in the country.

It is worth mentioning that a stage-by-stage increase in minimum capital requirements to the authorized organizations in 2020 helped consolidating the nonbank segment of the foreign cash market, improving its financial capacities, providing a sufficient resource base of the non-bank exchange offices and minimizing the risks of shortage in foreign and domestic cash when rendering services to the population. In 2020, the total amount of registered capital of the non-bank exchange offices doubled as compared to 2019 – from 21.8 billion tenge in 2019 to 42.6 billion tenge at the end of 2020.

In 2020, amendments were made to the Rules of Exchange Operations with Foreign Cash in the Republic of Kazakhstan, with regard to establishing the standard of public service "Issuance of license for exchange operations with foreign cash granted to the authorized organizations", limitating the participation in the authorized organization as its founders of the persons who are in the list of organizations and persons related to the terrorism and extremism financing in accordance with the legislation on counter-acting the illicit money laundering and terrorism financing.

In addition to the above, the composition of information received from the supervised entities for the purposes of control over their compliance with requirements of the legislation on counter-acting the illicit money laundering and terrorism financing had been extended. The list with the form and deadlines for submission of reports on compliance with requirements of the legislation of the Republic of Kazakhstan on counter-acting the illicit money laundering and terrorism financing by a corporate entity that operates exclusively via the exchange office based on the National Bank's license for exchange operations with foreign cash and the rules for submission of such reports with an aim to create conditions for the "anti-money laundering" culture of internal control at the authorized organizations and ensure transparency of foreign cash circulation, was approved.

In 2020, within the framework of currency control of exchange operations with foreign cash, the National Bank detected administrative violations in the sphere of currency exchange legislation and legislation on counter-acting the illicit money laundering and terrorism financing, 203 cases of administrative offence were initiated. Reprimands were administered in respect of 131 cases, a part of which – 19 – in the form of warning. The amount of penalties imposed by the National Bank and courts on 112 cases was about 50 million tenge. 108 supervisory response measures and two sanctions in the form of the license suspension for a definite period of time were taken in respect of the authorized organizations for violation of the currency exchange legislation of the Republic of Kazakhstan.

In 2020, the National Bank conducted 209 inspections regarding compliance with the currency exchange legislation of the Republic of Kazakhstan, including 139 inspections in respect of entities identified based on the risk assessment. Inspections of compliance with the currency control requirements were conducted on the basis of risk-focused approach.

In 2021, the National Bank will continue to elaborate measures required to enhance the effectiveness of currency control and to counteract the capital removal from the country by collecting and analyzing the data received under the framework of currency exchange legislation of the Republic of Kazakhstan and by analyzing doubtful foreign exchange transactions.

2.4 ANTI-CRISIS FINANCING

In furtherance of instructions given by the President of the Republic of Kazakhstan on financing the anticrisis measures, the National Bank implements a set of measures to support the economy, encourage the business activity and employment of the population totaling up to 2.3 trillion tenge in the following areas.

 Under the "Economy of Simple Things" Program, the National Bank, with its own resources and resources under its management, purchased bonds of banks and the "Agrarian Credit Corporation" JSC for up to 1 trillion tenge with maturity of up to 10 years at the final rate of return of up to 11% per annum for their subsequent lending to private businesses, which carry out their operations in the manufacturing industry and in the agroindustrial complex, at the interest rate not exceeding 15% per annum, 6% of which will be paid by private businesses and the difference will be subsidized by the government.

As at December 31, 2020, banks accepted 1 373 applications totaling 998.4 billion tenge, 516.2 billion tenge on 778 loans were disbursed. The "Agrarian Credit Corporation" JSC accepted 2 226 applications for 131.2 billion tenge, 2 066 loans of 96.4 billion tenge were disbursed, of which 590 loans equaling 25.0 billion tenge for financing the spring planting works and harvesting.

- 2. With an aim to support enterprises, which had suffered from the imposition of the state of emergency in the country and restriction measures, in the context of the Concessional Lending Program for Business Entities, the National Bank allocated 800 billion tenge to provide concessional loans for working capital financing with the term of up to 12 months and the final interest rate of 8% per annum.
 - As at December 31, 2020, banks accepted 2 493 applications totaling 612.5 billion tenge, 1 393 small and medium-sized business entities got the funding worth 528.0 billion tenge, of which 135.9 billion tenge from the monies received as repayment of earlier disbursed loans.
- 3. Under the "Employment Roadmap for 2020–2021" Program ("the Employment Roadmap"), the National Bank allocated five tranches totaling 700 billion tenge. Including the funds allocated by the Government of the Republic of Kazakhstan, the overall funding volume of the Employment Roadmap makes up 1 trillion tenge.

- At the end of 2020, the local executive authorities had drawn down 657.8 billion tenge from the funding provided by the National Bank; 238.9 thousand individuals had been employed.
- 4. As part of implementation of the Government Housing and Communal Development Program "Nurly Zher", the National Bank envisaged the allocation of funds totaling 390 billion tenge, of which 180 billion tenge – for construction of affordable housing by the local executive authorities and 210 billion tenge – to finance the concessional lending under the "5-10-20" ("Shanyrak") pilot project.

At end-2020, out of 180 billion tenge allocated for the construction of houses against home loans by the regions, 147.1 billion tenge had been drawn down. Under the "5-10-20" pilot project, out of 90 billion tenge allocated выдано 4 907 loans totaling 56.3 billion tenge were disbursed.

2.5 ASSET MANAGEMENT

2.5.1. 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 domestic currency out of the National Bank's assets, which have high liquidity in the international markets. At the end of 2020, gross gold and foreign exchange reserves of the National Bank amounted to 35.6 billion US Dollars, which is by 6.7 billion US Dollars, or 23.1%, larger than at the end of 2019.

A significant growth in gold and foreign exchange reserves in 2020 was associated with the increase in the volume of gold portfolio because of a rise in the price of gold and a net purchase of gold in the domestic market within the framework of the government's priority right to buy refined gold from domestic producers in order to replenish assets denominated in precious metals. The price of gold in 2020 went up by 24.2%. The volume

of a net purchase of gold in 2020 made up 1.9 million troy ounces (59.8 tons). In the reporting period, in conjunction with the formation of gold portfolio at the National Fund 18.7 tons of refined gold from the gold and foreign exchange assets totaling about 1 billion US Dollars were sold.

Also, the growth in gold and foreign exchange reserves is associated with the receipts resulting from the dispute resolution between the Government of the Republic of Kazakhstan and the Karachaganak Consortium for 1.3 billion US Dollars and also from a 0.9 billion Euro (1.1 billion US Dollars) loan contracted by the Government of the Republic of Kazakhstan with the Asian Development Bank.

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 2.5.1.1, Table 2.5.1.1).

Figure 2.5.1.1 Structure of gold and foreign exchange assets of the National Bank

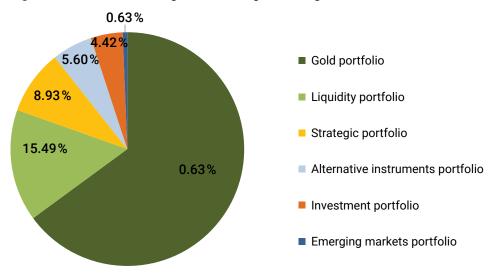


Table 2.5.1.1 Market value of portfolios at the end of 2020

Portfolio	Market value, billion US Dollars
Investment portfolio	1.61
Strategic portfolio	3.25
Gold portfolio	23.63
Emerging markets portfolio	0.23
Liquidity portfolio	5.64
Alternative instruments portfolio	2.04

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 markets of bonds of developed countries 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%.

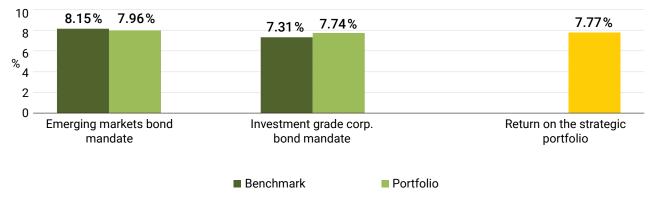
In 2020, the return on the investment portfolio expressed in terms of the currency basket was 1.88%, and the return on the benchmark portfolio was -1.63%. As a result, the positive excess return made up 26 basis points.

The return on the investment portfolio expressed in the US Dollars accounted for 4.09%, while the return on the benchmark portfolio was 3.82%. The excess return in the US Dollars made up 26 basis points.

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

The return on the strategic portfolio in 2020 made up 7.77% (Figure 2.5.1.2).

Figure 2.5.1.2 Returns on the strategic portfolio mandates



Funds in the emerging markets portfolio have been invested into assets denominated in the Chinese Yuan. In 2020, the return on portfolio in the Chinese Yuan had been at 1.89%, and in the US Dollars – 8.52%.

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 asset management of the liquidity portfolio.

The alternative instruments portfolio is held for diversification of gold and foreign exchange assets and for the increase in their return in the long term. Assets in this portfolio may be invested into such areas as private capital, hedge funds, funds of funds, real estate, infrastructure and equities. In 2020, the return on the alternative instruments portfolio made up 17.30%.

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. Because of a rise in the world prices of gold, in 2020 the return on the gold portfolio in the US Dollars was 24.25%. The return on the gold portfolio placed with deposits accounted for 0.03% in the troy ounce, and for 24.21% in the US Dollars.

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

The main objectives of investment operations conducted in the course of management of the National Fund's assets include ensuring their integrity, maintaining a sufficient liquidity level and providing their long-term profitability along with the appropriate risk level. In ensuring a long-term profitability of the National Fund's assets, short-term fluctuations in returns are allowed for.

The National Fund's goals are to maintain a sufficient liquidity level, save and preserve resources from the sale of non-renewable energy sources for future generations.

In the reporting period, the National Bank continued to fine-tune the process of the National Fund's asset management. The Resolution of the National Bank's Board dated March 19, 2020 No. 29, approved the Rules

for selection of external asset managers of the National Fund. New version was elaborated with an aim to improve the process of selection and monitoring of external managers and to use the best international practices for their evaluation.

In addition, the Resolution of the National Bank's Board dated April 21, 2020 No. 56 "On Amendments to the Resolution of the National Bank's Board dated July 25, 2006 No. 65 "On Approval of the Rules for Investment Operations of the National Fund of the Republic of Kazakhstan" signed off a new composition of the benchmark portfolio for the "Government Bonds of Developed Countries" Mandate in the savings portfolio of the National Fund. Therefore, from May 2020, the share of bonds denominated in the US Dollars was increased to 62.50% and the shares of bonds denominated in the Korean Won and in the Euro were reduced to 0% and 12.50%, respectively.

In August 2020, in connection with the transition to a balanced allocation, the portfolio in the Chinese Yuan was formed whose market value at end-2020 was equivalent to the amount of about 416 million US Dollars, or 0.76% of the savings portfolio.

Further, in order to preserve the portion of low risk assets of the National Fund in the environment of uncertainty in the market, amendments regarding the establishment of the minimum required volume of the stabilization portfolio of 5 billion US Dollars were made to the Rules for Conducting Investment Operations of the National Fund of the Republic of Kazakhstan as approved by the Resolution of the Board of the National Bank of the Republic of Kazakhstan dated July 25, 2006 No. 65 (the Resolution of the National Bank's Board dated September 21, 2020 No. 111).

With an aim to minimize the investment risk at an inauspicious moment when the growth rates of the global economy decelerated significantly because of the worldwide lockdown caused by the COVID-19 pandemic, the prolongation of execution period for transition to a new strategic allocation until the end of 2022 was enshrined in the Concept for the Formation and Use of the National Fund's Resources.

With a view to increase protection of the National Fund's assets, 600 732.1 ounces (18.7 tons) of gold were purchased in the reporting period, as a result the market value of the gold portfolio at December 31, 2020 made up 2.4 billion US Dollars, or 4.41% of the savings portfolio.

Based on 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 2020 was 61.4 billion US Dollars, including the volume of foreign currency portfolio – 58.7 billion US Dollars.

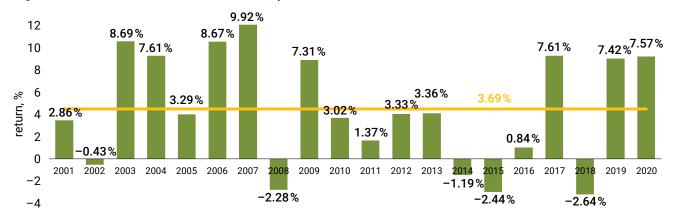
Market values of the stabilization and savings portfolios within the foreign currency portfolio of the National Fund

equaled to 4.3 billion US Dollars (7.25%) and 54.5 billion US Dollars (92.75%), respectively.

The returns were calculated in the National Fund's base currency – the US Dollars.

Return of the National Fund since its inception until December 31, 2020 made up 103.44%, in annual terms – 3.69% (Figure 2.5.2.1). The return on the National Fund's portfolio in 2020 accounted for 7.57%.

Figure 2.5.2.1 Return on the National Fund's portfolio, in the US Dollars



In 2020, assets in the stabilization portfolio under the National Bank's own management were invested into the money market instruments and fixed income securities, mainly securities of the US Treasury. During 2020, the return on the stabilization portfolio was 0.95% (Figure 2.5.2.2); during the same period, the return on the benchmark portfolio (Merrill Lynch 6-month US Treasury Bill Index) accounted for 1.05%.

Figure 2.5.2.2 Return on the stabilization portfolio in 2020



The total return on the savings portfolio in 2020 was 8.02%.

The return from management of the "Government bonds of developed countries" mandate in 2020 made up 5.1%.

The portfolio for the "Government bonds of developing countries" mandate consists of:

- the portfolio of Government bonds of developing countries, which is under the external management. The return from asset management accounted for 5.85%, whereas the return on the benchmark portfolio made up 5.71%.
- 2) the Chinese Yuan portfolio, which is managed by the National Bank itself. The return on the Chinese Yuan portfolio from its inception (August 2020) to end-2020 accounted for 6.02%. The benchmark for this portfolio is not prescribed.

The return from management of the "Corporate investment-grade bonds" mandate was 13.04%, whereas the return on the benchmark portfolio made up 8.82%.

The return from management of the Global Equities Mandate was 13.67%, whereas the return on the benchmark portfolio accounted for 16.42%.

The return from management of the Global Tactical Asset Allocation mandate made up 7.36%.

2.5.3 MANAGEMENT OF PENSION ASSETS OF THE UNIFIED ACCUMULATIVE PENSION FUND

At the end of 2020, the total amount of pension assets of the Unified Accumulative Pension Fund under fiduciary management of the National Bank made up 12.9 trillion tenge, or 99.9%, having increased by 19.4% during 2020 (Table 2.5.3.1).

Table 2.5.3.1 Structure of pension assets investment portfolio of the Unified Accumulative Pension Fund under fiduciary management of the National Bank

Item	Current value at January 1, 2020, billion tenge	Share at January 1, 2020, %	Current value at January 1, 2021, billion tenge	Share at January 1, 2021, %	Change over the period, %
Government securities of the Republic of Kazakhstan	4 368.0	40.5	5 730.1	44.4	31.2
Securities of issuers of the Republic of Kazakhstan	3 212.5	29.7	3 636.5	28.2	13.2
Securities of foreign issuers	1 898.4	17.6	2 138.7	16.6	12.7
Deposits with banks of the Republic of Kazakhstan	254.9	2.4	251.7	2.0	-1.3
Deposits with foreign banks	328.4	3.0	282.9	2.2	-13.9
Balances of investment accounts	510.7	4.7	12.0	0.1	-97.6
Assets under external management	211.9	2.0	816.5	6.3	285.3
Other assets	13.5	0.1	26.3	0.2	94.4
Total	10 798.3	100.0%	12 894.6	100.0	19.4

Pension assets are invested based on the market conditions into various financial instruments of both Kazakhstani and foreign issuers. In the local securities market, pension assets are invested in accordance with the investment areas approved by the Council for the National Fund Management of the Republic of Kazakhstan. The total volume of investments in the domestic financial market amounted to 2.3 trillion tenge (Table 2.5.3.2).

Table 2.5.3.2 Investments based on investment areas approved by the Council for the National Fund Management of the Republic of Kazakhstan, for 2020

Investments	Volume, billion tenge
Government securities of the Republic of Kazakhstan issued by the Ministry of Finance of the Republic of Kazakhstan	1 691.1
Foreign currency	56.6
Securities of international financial organizations and entities from the quasi-government sector of the Republic of Kazakhstan	576.8
Bonds of banks of the Republic of Kazakhstan	12.5
Bonds of the corporate sector of the Republic of Kazakhstan	5.0
Total	2 342.0

Pension assets denominated in foreign currency are being invested in accordance with the new earmarked strategic allocation set out by the Investment Declaration of the Unified Accumulative Pension Fund adopted in February 2020. To improve the "risk/return" ratio of the foreign currency portfolio of pension assets, the earmarked strategic allocation by asset classes was changed. Specifically, the money market instruments were replaced with the medium-term US treasury bonds to compensate volatility on other assets in the foreign currency portfolio (the earmarked portion - 30%). The earmarked portion of equities was increased from 21% to 25% of the foreign currency portfolio in order to boost the return on foreign currency assets. Historically, despite high volatility, the return on equities has been way above the return on other asset classes in the long term. Accordingly, the earmarked portions of bonds of developing countries and corporate bonds were reduced from 28% to 25% and from 21% to 20% of the foreign currency portfolio, respectively.

In 2020, in the effort to diversify and increase the returns on pension assets, the process of a phase-by-phase transfer of a part of the foreign currency portfolio to foreign asset managers was continued. An overall volume of transferred assets was 1 350.0 million US Dollars, including 450.0 million US Dollars under the Global Equities Mandate and 900 million US Dollars under the "Corporate investment-grade bonds" Mandate. As a result of this effort, during 2020 the portion of foreign currency portfolio of pension assets under foreign management was increased from 2.0% to 6.3% of the amount of pension assets (816.5 billion tenge, or 1.9 billion US Dollars).

At the end of 2020, the accrued investment return on pension assets of the Unified Accumulative Pension Fund amounted to 1 262.5 billion tenge, which is by 562.7 billion tenge, or 80.4%, more than in 2019. A "net" investment return distributed to accounts of contributors of the Unified Accumulative Pension Fund equaled 1 219.8 billion tenge. The bulk of investment return fell on return in the form of interest on financial instruments and from foreign exchange revaluation (66.0% and 23.0%). The volume of pension receipts amounted to 1 086.0 billion tenge.

The return on pension assets distributed in 2020 to accounts of contributors (recipients) of the Unified Accumulative Pension Fund accounted for 10.92%, while inflation made up 7.50%. In real terms (excluding inflation), the return was 3.4%.

2.6 STATISTICAL ACTIVITIES

The National Bank as the authority of government statistics carried out a set of arrangements aimed at collecting, processing and disseminating the national macroeconomic statistics in the sphere of monetary and financial statistics and the external sector statistics. The statistical activities at the National Bank have a multilateral and multisectoral aspect and are built on the basis of fundamental principles of statistical accounting, with consideration of international recommendations and best practices of foreign central banks.

In connection with the fact that from January 1, 2020, the competent authority for regulation and development of financial market of the Republic of Kazakhstan started its operation, in order to exclude the duplication burden on the business community, the function of collection of administrative data for regulation, control and supervision was assigned by law to the National Bank. Therefore, the key focus of the National Bank's statistical

activities in 2020 had become the optimization of information flows between the regulator and the market and the improvement in the quality of data received from the financial market entities. This work is performed in collaboration of the National Bank and the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market with the supervised financial and non-financial organizations.

In the context of primary objectives of improving the statistical activities, in 2020 the National Bank went on with development of the data collection and processing technologies and with providing common standards of data submission by financial organizations. Implementation of these objectives allows increasing the transparency of the statistical data generation process, improving their quality, reducing the burden on respondents and ensuring efficiency in the management decision-making.

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 financial market statistics.

Monetary statistics indicators are used in the formulation of monetary policy guidelines of the Republic of Kazakhstan and in the decision-making in the process of its implementation, in preparation of information about the status of international reserves, about the National Fund's assets, reserve money, money supply aggregates, key indicators of the credit and deposit segments of the financial market and other data.

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. Data are collected from banks, insurance (reinsurance) organizations and other non-bank financial organizations, the Development Bank, and the Unified Accumulative Pension Fund.

In 2020, the main effort on the formation of monetary and financial statistics was related to optimization of the statistics information database and to migration to the data-centric format of administrative report collection, which combines the needs of supervision and publication of statistical data. Given that a large volume of detailed information is collected from the financial market entities for the purposes of regulation, control and supervision, such approach enables to reduce the quantity of collected data and decrease the burden on respondents.

Monetary statistics are disseminated by publication of the aggregate statistical information in the form of spreadsheets and the "Statistical Bulletin of the National Bank of Kazakhstan" official monthly publication on the National Bank's Internet resource; in addition, based on the prepared sectoral balance sheets and monetary overviews of financial organizations, the National Bank prepares standardized reports and submits them to the IMF on a monthly/quarterly basis.

With an aim to ensure compliance with requirements of the international system of the Special data dissemination standard, the analytical accounts for the National Bank and deposit organizations are submitted on a monthly basis to the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan as the national coordinator of the system, for further publication on the national consolidated data page.

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.

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

External Sector Statistics

The external sector statistics include collection and processing of baseline statistical data and preparation of consolidated statistical reports and analytical tables in various breakdowns on the balance of payments, international investment position and external debt.

The aggregated data is disseminated as part of the National Bank's communication with the competent authority in the field of government statistics, also, in order to build up the national accounts system in accordance with a special data dissemination standard.

The data on the external sector statistics are published in the official publication, "Balance of Payments and External Debt of the Republic of Kazakhstan", on the official Internet resource of the National Bank.

In 2020, the National Bank, with an aim to improve the quality of statistics, introduced statistical reporting forms on international services in a new version: the data on construction services were disaggregated, the coverage of services provided to non-residents expanded. The Methodology on formation of the sampled population for conducting a sampling observation of enterprises in the real sector for the balance of payment purposes was prepared and approved.

For the first time, the Bank took part in the IMF project on information sharing about the securities issuers; the purpose of the project is to establish a centralized database of issuers for the subsequent use of this information by all countries participating in the project.

Methodological approaches to the assessment of branches of foreign companies implementing large projects within the territory of Kazakhstan including product sharing agreements were improved.

New tables were prepared on the expansion of analytical presentation of the external sector statistics – on foreign direct investments into Kazakhstan by regions of Kazakhstan and by types of economic activity in a region, on international services broken down by regions of Kazakhstan.

Developing the Report Gathering Functionality

One of the strategic areas in the National Bank's operation is the implementation of a Single Window Concept for gathering reports from the financial market entities both for statistical and for regulatory purposes.

In implementing the Single Window Concept, the works on building a common set of credit information indicators to realize the objectives of the National Bank's "Credit Register" and the credit history database by the credit bureaus were continued. The draft of the unified list of information indicators on deposits required for analytical and supervisory purposes as well as to meet the objectives of the Kazakhstan Deposit Insurance Fund was prepared.

A significant portion of works conducted in 2020 in the area of statistical data collection and processing is connected with the upgrading of the technological data collection and processing platform of these financial market entities – from local subsystems of data collection on sectors of the financial market to the unified platform oriented towards the granular data collection.

With a view to further improve the quality of granulated data on financial instruments, a pilot project entitled DataQuality was initiated, which is aimed at improving the quality of primary detailed data on loans at the first stage.

Given that from January 1, 2020, regulation of credit partnerships and lombards ("microfinance organizations") was included into the regulation scope of the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market, the data collection functionality was designed and implemented where the data are gathered via the web-service available on the National Bank's Internet resource with a simplified respondent authorization (using the electronic digital signature of the National Certification Center as an alternative to the EDS of the KISC) and with the use of the "Respondent's Personal Cabinet" web interface.

In the first half of 2020, within the National Bank's contact center established on the basis of the Bank Service Bureau, a full-scale technical support for microfinance organizations in the regions and consultations on report preparation and the submission procedure, on running the web-portal functionality were implemented.

Therefore, the National Bank as an operator engaged in collection of reports from the regulated financial market entities makes arrangements to migrate to collection of data at the level of primary detailed data (granulated data) on financial instruments, to design the elements of the data management systems including the Unified database of the financial market entities, for a further improvement of instruments of the advanced analytics.

2.7 DEVELOPING FINANCIAL TECHNOLOGIES

The digital transformation of the financial market is conducted with the support of regulators such as the National Bank, Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market and regulators from the related sectors in accordance with the goals and priorities in the development of the financial sector and the economy as a whole.

On August 17, 2020, the National Bank approved the "Concept for Development of Financial Technologies and Innovations for 2020–2025". The Concept defines key priorities for development of innovation technologies in the financial market of the country and the role of the market participants. The Concept is focused on increasing efficiency of the National Bank's operation, developing the national infrastructure of the financial market and creating conditions for development of the financial technologies market.

The Concept defines key priorities and strategic initiatives, which are intended to attain three goals:

- establishing a highly technological communication with the financial market participants and increasing efficiency of the regulator's performance;
- enhancing the penetration of digital financial services, reducing overall costs of the sector and building a "trusted operating environment" for communication of the market participants;
- 3) encouraging the market development by creating conditions for healthy competition and improving collaboration among the market participants.

Initiatives contained in the Concept will be implemented by the National Bank jointly with the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market within the framework of the Roadmap, which will enable to increase the government policy effectiveness and to take a quantum leap in the development of the country's financial sector.

On October 1, 2020, the National Bank put the remote biometric identification service into a full-scale commercial operation. The operational launch of the service in the "pilot" mode in April 2020 enabled banks to open bank accounts to individuals for getting social benefits in the period of pandemic.

This service makes it possible to get financial services without a physical visit to a financial organization by using the "face recognition" technology. The service is available both to banks and to insurance companies, professional securities market participants, payment and microfinance organizations. As at December 31, 2020, 13 banks, 2 payment organizations were using the service (based on the signed contracts).

From the time when the service was launched in a pilot mode in April 2020, more than 4.0 million banking services were provided with the use of the service. At present, services related to the opening of special current accounts for transferring lump-sum pension payouts to the "Otbasy Bank" are provided with the help of the service.

In the context of the National Payment System Dvelopment until 2025, the National Bank works on the study of a potential and optimum design of the Central Bank Digital Currency infrastructure in the Republic of Kazakhstan.

In order to study the possibility of introducing the digital currency, the National Bank acceded the international working group R3 Central Bank Digital Currency among 28 central banks. The working group plans to assess the Ripple technology from R3 Company for building an infrastructure, algorithm (the list of questions) to elaborate the Concept for Central Bank Digital Currency in Kazakhstan.

The National Bank also collaborates with the THOUSAND CITIES CLOUD ALGORITHMS in formulating a proposal for upgrading the existing payment infrastructure in Kazakhstan.

Along with that, in 2021 there is a plan to elaborate approaches to introduction of digital currency jointly with the market participants and international partners, whereby a publication of the advisory community report about the digital tenge is scheduled for the second quarter of 2021.

In the third-fourth quarter of 2021, it is planned to develop technological prototypes and to launch a pilot project on the introduction of digital currency; based on its results, a decision about the project scaling will be made. As part of the working group of central (national) banks of the EAEU member countries on coordination of the national payment systems development in the area of "Cooperation in the field of financial technologies development", the National Bank participates in implementation of a pilot project on open information interfaces.

The main purpose of the pilot project is to fine-tune the methodology of open information interfaces within the framework of communication among financial organizations of the EAEU member countries.

At end-2020, parties to the pilot project – financial organizations – designed open information interfaces in accordance with the pilot project technical standard. In 2021, the testing of interaction between open information interfaces of financial organizations, assessment of the potential and the existing constraints in the use of the open information interface methodology will be continued.

In order to make the National Bank's performance more efficient, an effective information systems architecture

is being built by implementing and running a new class of platform solutions.

With an aim to digitize the business processes, the National Bank's "Digital Kernel" platform has been implemented; as a result of digitation, labor costs are expected to be cut by 65%, and the paper workflow – by 80%.

In developing the digital infrastructure of the financial market, the National Bank undertook the following measures: the centralized data management system of the National Bank was started to be implemented; a unified platform of business data collection and a new version of a web-portal for the market were put in place; arrangements are made to realize the transition to a fully-electronic communication with the market participants; to ensure technological interaction with the market participants, activities were initiated to implement the open information interface technology for consistent migration to an online collection of reports from the financial market entities.

2.8 INFORMATION SECURITY

In 2020, a joint resolution of the Board of the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market and the Board of the National Bank "On Approval of the Strategy of Cybersecurity of the Financial Sector of the Republic of Kazakhstan for 2020–2022" was passed.

In accordance with the "Strategy of Cybersecurity of the Financial Sector of the Republic of Kazakhstan for 2020–2022", there is a plan to establish the Center for Exchange and Analysis of the Financial Market Information with the objective of building a unified technological platform for collection and formation of the common database about incidents of cybersecurity in the financial market.

During 2020, with a view to increase the level of the staff competence in cybersecurity, 1 278 employees of the National Bank had undergone specialized training on the online platform to master the skills of cybersecurity. In the course of training, the employees were briefed about information threats and acquired the skills on

the basis of case studies. The works in this area are underway.

As part of the information exchange about information security incidents and the National Bank's communication with the "State Technical Service" JSC and the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market, an exchange of data on the existing vulnerabilities and cyber threats within the territory of the Republic of Kazakhstan and the Russian Federation was organized. Based on the results of such communication, 372 IP-addresses of intruders as well as 713 e-mail accounts of spammers were blocked in 2020.

With an aim to avoid the spreading of COVID-19, a set of measures had been undertaken to organize a safe remote connection to work stations for transfer to the teleworking regime of at least 60% of the National Bank's staff. At the same time, a mechanism of safe remote connection with the use of two-factor autentification was elaborated.

2.9 INTERNATIONAL COOPERATION

In 2020, 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 2020, 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 Sub-Group and the National Bank's counterparts were held. Also, 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. The National Bank had a virtual ceremony with the IMF Mission in accordance with Article IV of the IMF Articles of Agreement.

The National Bank went on with adoption of legal documents governing the financing of operation of the Caucasus, Central Asia, and Mongolia Regional Capacity Development Center in Almaty ("the IMF Regional Center"), which will start its operation in a virtual format in 2021. So, the National Bank was engaged in securing approval for the Memorandum of Understanding between the Republic of Kazakhstan and the IMF to establish the IMF Regional Center with the stakeholders from government authorities of the Republic of Kazakhstan.

On December 14, 2020, Dossaev E.A., Governor of the National Bank and Georgieva K., IMF Managing Director, signed the Letter of Understanding on Financing the IMF Regional Center.

The National Bank was consistently taking part in the panel discussions arranged under the IMF auspices and dedicated to deliberation of consequences of the COVID-19 pandemic and to the anti-crisis measures undertaken to support the financial sector and recover the economic activity.

In 2020, the National Bank's senior management also held meetings with representatives of the World Bank and other international financial organizations to discuss bilateral cooperation, macroeconomic situation and the monetary policy pursued.

During 2020, the National Bank continued to bring in technical assistance from international financial organizations. So, 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 Financial Market, initiated the establishment of the non-performing assets market. The technical assistance from the European Bank for Reconstruction and Development is brought in to implement this project.

The National Bank made an effort to bolster Kazakhstan's profile in the international MSCI and FTSE ratings. In this connection, the National Bank, jointly with the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market, the European Bank for Reconstruction and Development and a number of government agencies of Kazakhstan, set up a Steering Committee and the working group to address the issues related to bolstering of Kazakhstan's profile in the international indices and to control over execution of the elaborated action strategy; in addition, the Action Plan of the Steering Committee and the working group on upgrading Kazakhstan's positions from "Frontier Markets" to "Emerging Markets" and "Secondary Emerging Markets" in the international MSCI and FTSE indices, respectively, was approved.

In 2020, in order to increase Kazakhstan's attractiveness for global investors, the National Bank took part in the meeting with global investors organized by the Citi.

Cooperation with the international rating agencies regarding the sovereign rating of Kazakhstan was carried on. Based on the conducted consultations, Fitch Ratings and S&P Global Ratings confirmed the long-term sovereign rating of Kazakhstan at BBB with the rating outlook as stable and at BBB- with the rating outlook as stable, respectively.

As part of its collaboration with foreign central banks, the National Bank had a virtual meeting with the representatives from the National Bank of Switzerland and the Central Bank of Korea to discuss bilateral cooperation and the possibilities of bringing in the technical assistance. The National Bank also took part in the International Online Forum of the North Economic Cooperation of the Central Bank of Korea

entitled "The Eurasian Economic Council: Vision and Problems" with an aim to stir up the bilateral cooperation between international departments of central banks of the countries and to get familiar with the technical assistance programs of the Central Bank of Korea. The forum served as a foundation for discussing the training programs (Central Banking Study Program) and study tours and as the possibility for providing technical assistance as part of the Knowledge Partnership Program-Bank of Korea.

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, Eurasian Interstate Council, and the Council of the Interstate Bank.

On June 4, 2020, the National Bank's Governor Dossaev E.A. participated in the session of the Advisory Board for Exchange Policy of national (central) banks of the EAEU member states to exchange information about measures undertaken to mitigate negative consequences of the COVID-19 pandemic.

In addition, participation of the National Bank's representatives in the sessions of the Consultative Committee on Macroeconomic Policy, Consultative Committee on Statistics, Consultative Committee on Financial Markets of the Eurasian Economic Commission, the Eurasian Council, and Eurasian Council of Heads of Central (National) Banks was organized.

In 2020, in developing the Eurasian integration, the elaboration of plans for harmonization of legislation in the financial sphere and of the draft sectoral agreements was carried on. In particular, the activity on intra-government approval of the Agreement about coordinated approaches to the regulation of legal relationship in the area of foreign exchange and adoption of liberalization measures and the Agreement on the Advisory Board for Exchange Policy of the EAEU member states was continued. The National Bank went on with developing a common payment space within the EAEU and took part in signing off the "Strategic Directions for Developing Eurasian Economic Integration until 2025".

During 2020, the National Bank, jointly with the stakeholder government agencies of Kazakhstan, was engaged in the preparation of the second round of mutual assessments of the Eurasian Group on Combating Money Laundering and Financing of Terrorism for compliance of Kazakhstan's legislation with international standards of the Financial Action Taskforce.

In 2020, the National Bank continued to study the possibilities for development of settlements in the domestic currencies with Kazakhstan's main trading partners both in a bilateral format and within the framework of integration associations. So, in May 2020 an expert meeting was held with the Central Bank of the Russian Federation to discuss the increase in volumes of the direct ruble/tenge trading, creation of conditions for development of the market-based financial instruments in order to raise the share of settlements in the national currencies.

In the context of development of economic cooperation within the frames of the Shanghai Cooperation Organization, in September 2020 the National Bank's representatives participated in the virtual round table discussion on signing off the draft of the "Roadmap for a gradual increase in the share of national currencies in mutual settlements within Shanghai Cooperation Organization".





3.1 ORGANIZATIONAL STRUCTURE AND STAFFING

The National Bank is making an ongoing effort in building a platform for increasing its performance, including by establishing an optimal structure and the staffing table and creating conditions for the human capital development.

At end-2020, 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

	Staff size at end-period							
	According to the organizational	chart, number	Staffing table, number	r of individuals				
	2019	2020	2019	2020				
1	2	3	4	5				
Head-office	1 287	838	1 167	727				
Representative office	-	48		48				
Branches	1 300	1 192	1 324	1 228				
Sub-total	2 587	2 078	2 491	2 003				
National Bank's organizations (RSOEs)	1 027	905	891	894				
Grand total at the National Bank	3 614	2 983	3 382	2 897				

The number of women among the National Bank staff was 1 219 individuals (60.9%), including 458 individuals (63.0%) in the head office, 733 individuals (59.7%) in the branches, and 28 individuals (58.3%) – in the Representative Office.

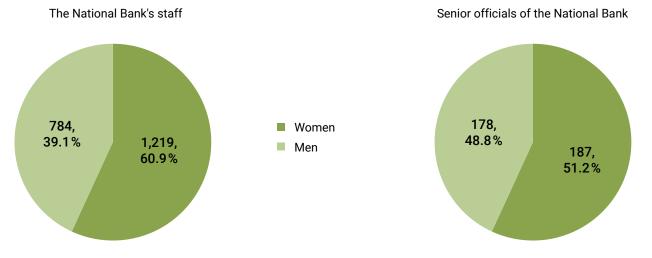
The gender distribution among the managerial staff was as follows: the number of female executives was 187 individuals (51.2%), including 80 individuals (46.8%) in the head office, 99 individuals (54.4%) in the branches, and 8 individuals (61.5%) – in the Representative Office (Figure 3.1.1).

The average age of the National Bank's staff in the head office was 37 years old, in branches – 42 years old, in the Representative Office – 44 years old, and in organizations – 42 years old.

During 2020, the rate of the staff turnover at the head office of the National Bank accounted for 12.8%, at the branches -5.1%, and at organizations -5.5%.

As for the head office, the resulting rate of the staff turnover was associated with the National Bank's relocation to the city of Nur-Sultan and the termination of employment of some employees who refused to move to another locality together with the employer.

Figure 3.1.1 Gender composition of the National Bank's staff



With an aim to strengthen the employee pool of the National Bank, in 2020 the selection of highly qualified personnel was conducted including:

- 227 resumes of candidates for inclusion into the National Bank's employee pool were reviewed; based on the selection outcomes, 13 candidates were enlisted into the employee pool;
- 2) 45 individuals out of the National Bank's employee pool built up during 2019–2020 and among graduates from the masters school with the autonomous organization of education "Nazarbayev University" were employed at the head office and Representative Office of the National Bank, including 31 candidates out of the employee pool and 14 master's students who have undergone training under the MSc in Finance Study Program;
- 3) a campaign was run with succession candidates of the Presidential Youth Employee Pool based on which 5 succession candidates were appointed to managerial positions: 3 succession candidates – to the head office of the National Bank, 2 succession candidates – to organizations under the National Bank's jurisdiction.

During 2020, 823 employees of the National Bank had undergone training and career enhancement, of which 428 individuals (398 – online) – at the National Bank's premises and its training center, 202 – in the training centers in Kazakhstan, and 193 (175 – online) – abroad.

The Bank collaborated with the leading universities on educational projects, based on which:

- a contract was entered into with the autonomous organization of education "Nazarbayev University", whereby three employees of the National Bank were nominated for the study programs – under the Executive MBA Program, and 12 individuals – under the MSc in Finance Study Program;
- a cooperation agreement was concluded with the non-for-profit joint-stock company "Narkhoz University", whereby 30 individuals were nominated for the following study programs: "Financial Analyst", "Financial Risk Management", "Macroanalytics and Forecasting", "Actuary".

3.2 RISK MANAGEMENT

3.2.1 FINANCIAL RISKS MANAGEMENT

The management of the National Bank's gold and foreign exchange assets, the National Fund's assets and pension assets of the Unified Accumulative Pension Fund carried out by the National Bank implies a need for an ongoing financial risks analysis and assessment. As part of the financial risk management process, the National Bank ensures that there is a system in place to identify and asses market and credit risks and the methods of controlling and monitoring the risk level. In order to control the level of credit and market risk to which assets under the management of the National Bank are mostly prone, the appropriate limits and restrictions are set, which have to be revised regularly based on the current market changes and the approved investment strategy.

In 2020, the pandemic and associated quarantine restrictions worldwide exerted a significant effect on the global economy and international financial markets. Governments of many countries adhered to the quantitative easing and monetary stimulus policy

that resulted in reduction of interest rates to nearly zero and to high volatility of the stock markets. Due to the observed high volatility in the market and in order to find out negative information regarding the issuers of securities under the National Bank's management on a timely basis, the system of red flags based on the news sentiment was designed and the deadlines for elimination of deviations were shortened.

Credit risk is managed by establishing requirements to the credit quality of financial instruments, their issuers and counterparts of the National Bank. In addition, the system of credit risk limits was designed, namely limits on operations with counterparties, on financial instrument purchases from one issuer, on concentration, and limits on custodian were set.

Pension assets were invested in accordance with the list of financial instruments eligible for purchase with pension assets of the Unified Accumulative Pension Fund that are under fiduciary management of the National Bank as set forth by the Government Decree of the Republic of Kazakhstan dated March 18, 2016 No. 149. In 2020, for

managing market risks in investing the pension assets of the Unified Accumulative Pension Fund, the National Bank determined the strategic foreign currency asset allocation in connection with the transition to the passive management with the identified total risk. In addition, limits were set for the share of long-term financial instruments and limitations for the term for which pension assets are invested into bank deposits were imposed.

In 2020, due to high volatility in the global market and a worldwide change of the economy, limits for some types of financial instruments in the pension asset portfolio of the Unified Accumulative Pension Fund were revised and lowered. In addition, limits for balances of investment accounts were introduced and Stop loss and Take Profit limitations were set for transactions with financial derivatives

Besides, the assessment of political and economic situation in the countries with the use of such indices as Bloomberg Country Risk Aggregate Score and Worldwide Governance Indicators, which include such indicators as anti-corruption efforts, government efficiency, political stability, the rule of law, the quality of regulatory framework, a right to vote and accountability, and credit quality of issuers, was designed. The assessment system was applied for setting limitations in respect of financial instruments of the countries where investments could be potentially made.

In accordance with the International Financial Reporting Standard 9, "Financial Instruments", the expected credit losses on the National Bank's financial assets are calculated on a quarterly basis and provisions for such losses are created. The calculation of expected credit losses is based on the credit ratings of financial assets assigned by the international rating company Standard & Poor's, and on the default probability table prepared by this company.

On a quarterly basis, the National Bank had set internal credit ratings and indicative limits for banks, which are based on the methodology for assessing the bank's classic financial indicators and credit rating set by international rating agencies as well as the bank's loan portfolio.

3.2.2 OPERATIONAL RISK AND CONTINUITY OF OPERATIONS

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 is premised on an ongoing revision 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 adjusted to the National Bank's activities. It analyzes the existing processes of the National Bank and implements the elaborated recommendations regarding risk minimization.

The internal audit at the National Bank is conducted in accordance with the International Internal Audit Standards. Audit inspections are carried out as part of auditor groups comprised of the staff possessing CIA, CFA, DipIFR international certificates.

In 2020, eight scheduled audit inspections were conducted in 15 business units of the head office, 14 branches, 1 subsidiary of the National Bank and one unscheduled inspection was carried out.

Based on the findings of audit inspections, recommendations were made to increase effectiveness of risk management and to strengthen the internal control system of the National Bank. At the end of 2020, 31 out of 37 internal audit recommendations were fulfilled, with the performance ratio accounting for 84%.

In 2020, the National Bank's relocation as well as the coronavirus pandemic appeared to be the most significant challenges in risk management at the National Bank. As part of risk management, risks were identified, analyzed and classified, based on this effort, relevant measures had been taken, which allowed a successful relocation to the city of Nur-Sultan, while ensuring the continuity of the National Bank's operations. In addition, approaches to ensuring the continuity of operations are revised in order to comply with international standards.

3.2.3 COMPLIANCE CONTROL

In meeting the requirements of anti-corruption legislation, a full-scale effort to implement the compliance function in the National Bank's system was taken. In the reporting year, the National Bank's policy in the field of compliance was approved; the policy defines goals, objectives, basic principles for arranging compliance control at the National Bank and the action plan for a stage-by-stage implementation of the compliance function at all enterprises and joint-stock companies with the National Bank's participation.

In 2020, the internal analysis of corruption risks at the National Bank's branches was performed. This analysis was undertaken at the National Bank for the first time and was aimed at detecting corruption offence, and investigating the reasons and conditions which were conductive to such offence. The internal analysis of corruption risks was carried out in the following areas: provision of public servics, personnel management, procurements, fulfillment of control and supervision functions. 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 as well as the new anti-corruption legislation.

During 2020, no instances of violations of the anticorruption legislation by the National Bank staff had been detected.

3.3 RESEARCH WORK AT THE NATIONAL BANK

Implementation of the National Bank's mandate of ensuring the price stability and financial stability requires an insight into the variety of factors that make up the economic environment, into the mechanisms of relationship between the fiscal, monetary and regulatory policy, properties of the transmission channels, conditions of their activation and effective communication with the public. In 2020, the National Bank conducted economic studies aimed at obtaining the necessary knowledge for solution of such objectives as well as at the development of analytical toolkit as part of the monetary and macroprudential policy implementation.

In 2020, the National Bank went on with reviewing the trends in the domestic and external markets and with the studies of economic correlations and phenomena. Possible scenarios in light of the effect of the COVID-19 pandemic had been modelled on their basis and short-term and long-term forecasts of key macroeconomic indicators were made, including inflationary processes. The outcomes of these studies were used in the decision-making on the base rate.

To ensure transparency of decisions and to make communication more effective, this effort was accompanied by the publication of press releases on the base rate and analytical and research materials. The results of analysis of key macroeconomic factors influencing inflationary processes as well as forecasts of macroeconomic parameters used in the decisionmaking about the level of the base rate were published in a quarterly publication, "Inflation Report". Starting from the third quarter of 2020, the National Bank replaced this publication with the "Monetary Policy Report" with an aim to further improve its communication policy and increase awareness about its activities. The "Monetary Policy Report" presents a section devoted to the monetary policy and the regulator's actions in a broader view. The description of the existing forecast conditions including the analysis of the global economy, of the economic situation in the trading partner countries and in the commodity markets, development of the domestic economy, fiscal policy and inflationary processes is provided in a separate section, "Macroeconomic Conditions".

In the area of external sector, in 2020 the analysis of the balance-of-payments risks was performed including the effect of the global lockdown and restriction measures, risks of the impact from depreciation of the ruble on Kazakhstan's balance of payments and the influence of fiscal impulse on the current account, consideration of oil exports, the foreign exchange market

and the potential of import substitution. The outcomes of these studies were used in the decision-making regarding the monetary policy.

In order to implement the objective of promoting financial stability, in 2020 quarterly bank surveys were conducted on the credit market quality parameters. As part of the survey, questionnaires and interviews were conducted regarding the trends in demand and supply in the environment of pandemic, the pricing and non-pricing terms and conditions of lending to businesses and the population in the reviewed quarter and about their expectations regarding the development of lending activities. The survey outcomes were posted on the National Bank's web site in the form of the publication "Bank Survey on Lending".

In the context of research on the systemic risk assessment, the elaboration of methods for assessing the bank loan portfolio quality at the level of individual loans based on the credit register data was continued. The fine-tuned methodology is based on the assessment of cash flows on a loan and allows obtaining a more objective assessment of quality of individual loans and the overall loan portfolio. The National Bank also went on with the study of funding and liquidity risks of the banking sector. The results of systemic risks analysis were published in 2020 in the "Financial Stability Report of Kazakhstan, 2018 – 1st half of 2019".

In monitoring the business climate in the real sector of the economy, in 2020 the National Bank was conducting the enterprise surveys on a periodic basis to identify the main trends in the business environment. The results of performed analytical work were reflected in the "Market Review" and "Industry-Based Market Review", which are published on the official Internet resource of the National Bank on a quarterly basis. In addition, based on the results of enterprise surveys, the National Bank published Kazakhstan purchasing managers' index on a monthly basis, which represents a leading indicator enabling to study and forecast the dynamics of economic trends and turning points of the business cycle.

In designing the fiscal rules capable of improving the coordination with the monetary policy, the National Bank made assessment of the effect exerted by various fiscal rule parameters on the dynamics of the National Fund, debt and spending. Based on the performed analysis, proposals were submitted to the Ministry of National Economy of the Republic of Kazakhstan regarding the countercyclical fiscal policy aimed at restraining the state budget spending at the level of cut-off price and the threshold for the growth in government spending. Also, in collaboration with the Ministry of National Economy of the Republic of Kazakhstan, amendments to the Concept for Formation and Use of the National Fund's Resources were elaborated. In accordance with amendments, these policy rules should be adopted in 2021 and should come into effect in 2022 when preparing the national budget for 2023 and beyond.

In order to provide the analytical information about the situation in the money market and foreign exchange market to the financial market participants and the population, in 2020 the National Bank continued to publish a quarterly periodical, "Financial Market Review" including the newly added sections "Credit Market", "Deposit Market" and "Equity Market", where the results of analysis of trends in the financial market and key liquidity flows are presented. In the course of analysis of the government securities market, the assessment of problems in the development of the government securities market was made and its results were delivered at the CBonds Congress on the topic of "Debt Market of the Republic of Kazakhstan" in March 2020.

Economic studies conducted with the help of modernized analytical toolkits and modelling techniques for probabilistic forecasting increase the quality of analysis and help making substantiated decisions. For this purpose, in 2020 new modelling techniques were added into the system of GDP forecasting by the final consumption method, short-term modelling techniques for GDP by the production method were improved, the system of comprehensive analysis and economic forecasting (SCA&EF) and inflation forecasting system (AutoARIMA 510) were created, the automated system for web scrapping of consumer prices on a daily basis "Galymzhan 2.0" was designed, the forecasting technique for exports and imports of goods as well as for the balance on income with the use of the approach of a deeper disaggregation for the balance-of-payments forecasting were revised.

The results of the National Bank's research were also published in the "Economic Review of the National Bank" on the National Bank's Internet resource. In 2020, three issues were prepared where 16 articles in the field of monetary economics, macroeconomic policy and

financial stability were published. The articles covered such aspects as inflation, the exchange rate, balance of payments, economic growth, labor productivity, early warning signals, innovation decisions in the payment card market, digitization of financial services, the role of central banks, large technology companies, money circulation, capital flows, investments, deposits, cryptocurrencies, computer-assisted learning tools, modelling and forecasting.

In order to popularize the "Economic Review of the National Bank" periodical and make it identifiable internationally, in 2020 the work was undertaken to assign the International Standard Serial Number (ISSN) to this publication, thus increasing the access to the periodical and its recognizability for libraries, subscription agencies, researchers, and simplifying the information search about the periodical in the automated systems at the national and international levels. Besides, in 2020 articles from the "Economic Review of the National Bank" were included into the RepEc, International Bibliographic Database of Research Papers in Economics. This will enable to significantly increase the visibility of articles published in the periodical, monitor statistics about the quantity of citations and downloads of articles and will generally help making the scientific and research reputation of the National Bank.

In 2020, the Research and Analytics Center using the staff from analytical and research business units was

established at the Representative Office of the National Bank in the city of Almaty.

In order to increase their research capacity, the National Bank employees participated in online conferences and webinars organized by international financial organizations, central banks of other countries including their participation as speakers in the international webinar organized by the IMF in cooperation with the Joint Vienna Institute on the topic "Resource-rich Countries' response to the Pandemic", where the presentation about the effect of the pandemic on Kazakhstan's economy and the measures taken by the government to mitigate its consequences was offered to the audience.

As part of the preparation of strategic program materials, streamlining analytical efforts on assessing the productivity and making recommendations regarding the development of Kazakhstan's economy, the National Bank staff participated in the meetings with experts from the IMF, European Bank for Reconstruction and Development and the World Bank.

During the year, the results of analytical and research works were broadly highlighted in the presentations of the senior management via the mass media, and their detailed information was regularly posted on the National Bank's official Internet resource.

3.4 COMMUNICATION POLICY

The National Bank makes an ongoing effort to raise awareness among the general public, financial organizations and the expert community about its activities by publishing press releases, newsletters, reports and expert comments on relevant topics on its official Internet resource, provides explanatory interviews in the mass media on current issues.

In the first quarter, the National Bank conducted a set of briefings for the mass media regarding the decisions on the base rate with participation of the National Bank's Governor and on updating about the results of the banking sector's asset quality review. The corresponding press releases were published on the official Internet resource and official accounts of the National Bank at the social media. Because of

the existing epidemiological situation, from mid-March activities were moved to an online format.

As part of the public awareness effort, on a monthly basis the National Bank has been publishing interviews of the Deputy Governors in the printed media, on TV and in electronic media about the monetary policy guidelines, the situation in the domestic foreign exchange market, factors of influence on the domestic currency, the status of the country's gross international reserves, the balance of payments, implementation of anti-crisis programs and on other current issues.

The National Bank employees were regularly providing explanatory comments on the existing situation with the exchange rate of the tenge, on the outcomes of enterprise surveys, inflationary expectations of the population; a full-scale detailed information campaign was conducted regarding the extension of the deadlines for acceptance and exchange of the olddesign banknotes for the valid currency notes. In 2020, responses were prepared for 199 inquiries from the mass media.

In total, during 2020 more than 1000 materials were published in the mass media as well as 55 press releases, 133 newsletters, 34 comments on the National Bank's Internet resource.

In 2020, the National Bank put into commercial operation an updated version of the Internet resource while preserving the unique array of data that was available in the previous version of the Internet resource. Statistical data, reports, overviews, statements, information on strategic documents, concept papers and programs of the National Bank are regularly published on the web site

For the purposes of providing on-stream information, the work on development of official accounts of the National Bank in the social media was enhanced. In 2020, in total about two thousand materials were published in the National Bank's accounts on Facebook, Twitter, Telegram and Instagram, 144 videos – in YouTube, responses were given to the coming questions and comments in the social media about the current activities of the National Bank.

With an aim to ensure maximum openness and transparency, the National Bank will keep on adhering to the high standards of communication policy in its operations.

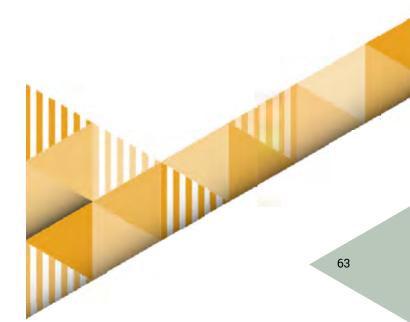
3.5 PUBLIC SERVICES

In 2020, the National Bank (including the Unified Accumulative Pension Fund) provided 1 198 861 public services (including 845 145 services provided electronically), of which 386 public services were provided exclusively by the National Bank (in an electronic format).

In order to optimize business processes in the provision of public services, the National Bank was taking part in the work of the inter-departmental commission on selection of public services that should be provided via the Government for Citizens Corporation. Based on the outcomes of the work done by the public services commission, the National Bank made the decision to exclude the public service "Providing information about the status of pension accumulations (including the investment return) of a contributor (recipient) of the Unified Accumulative Pension Fund" from the Public Services Register.

As a result of implementation of the commission's decisions as well as of amendments made to the legislation, at end-2020 the National Bank was providing the following 4 public services, which are 100% available to the recipients of services in the electronic format on the e-Government web-portal:

- Issuing a license for exchange operations with foreign cash that is granted to the authorized organizations;
- 2) Issuing a license to corporate entities whose sole activity is encashment of banknotes, coins and valuables;
- Including the payment organizations, which passed the record registration at the National Bank of the Republic of Kazakhstan into the register;
- 4) Giving an approval for voluntary reorganization (merger, takeover, split-up, demerger, transformation) of payment organizations.





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

	2019	2020		2020		
			l quarter	II quarter	III quarter	IV quarter
Current account	-7 296.4	-6 272.8	2 140.3	-1 339.6	-5 542.9	-1 530.6
Trade balance	18 130.5	10 506.2	7 106.0	2 930.4	-1 097.7	1 567.5
Exports f.o.b	58 164.6	46 714.5	14 364.5	11 688.7	9 328.2	11 333.1
Imports f.o.b	40 034.2	36 208.3	7 258.6	8 758.3	10 425.9	9 765.6
Services	-3 716.9	-3 064.3	-927.3	-834.4	-742.2	-560.4
Exports	7 745.3	5 032.0	1 538.0	1 066.9	1 156.6	1 270.5
Imports	11 462.2	8 096.4	2 465.4	1 901.2	1 898.8	1 831.0
Balance on primary income	-22 752.2	-14 930.1	-4 056.9	-3 384.2	-3 701.0	-3 788.0
Compensation of employees balance	-1 599.4	-899.9	-401.2	-189.0	-140.5	-169.3
Investment returns	-21 284.7	-14 157.0	-3 688.5	-3 225.9	-3 591.2	-3 651.3
Income receivable	2 376.2	1 922.0	458.4	393.2	461.3	609.2
Income on direct investments	655.0	372.1	47.2	57.3	98.7	168.9
Income on portfolio investments	1 273.5	1 181.1	315.9	266.7	235.6	362.9
Income on other investments	447.7	368.9	95.3	69.3	127.0	77.3
including interest on reserves and assets of the National Fund	1 171.8	969.7	277.6	220.4	187.2	284.5
Income payable	23 660.9	16 079.0	4 146.9	3 619.2	4 052.5	4 260.5
Income on direct investments	21 256.0	13 908.4	3 590.9	3 072.3	3 497.7	3 747.4
Income on portfolio investments	991.5	901.0	212.4	250.0	211.9	226.7
Income on other investments	1 413.5	1 269.7	343.6	296.8	342.9	286.3
Other primary income (net)	131.9	126.8	32.8	30.7	30.7	32.6
Balance on secondary income	1 042.3	1 215.4	18.6	-51.4	-2.0	1 250.3
Capital account balance	193.7	-44.4	59.0	154.6	26.0	-284.1
Financial account (excluding reserve assets of the NBK)	1 611.4	-15 304.6	-551.0	-5 525.1	-3 360.9	-5 867.4
Direct investments	-5 498.1	-5 905.4	-1 816.9	-2 188.5	-700.0	-1 200.0
Net acquisition of financial assets	-2 177.5	1 359.3	-361.5	1 045.9	524.7	150.2
Net incurred liabilities	3 320.6	7 264.6	1 455.4	3 234.4	1 224.7	1 350.1
Portfolio investments	5 127.3	-7 676.4	-1 860.8	-1 744.4	-4 703.8	632.7
Net acquisition of financial assets	4 895.3	-6 683.5	-1 541.4	-2 293.0	-4 098.9	1 249.8
Government of the RK and the National Bank of the RK	1 893.5	-7 569.1	-1 228.3	-1 875.4	-3 496.9	-968.4
Banks	748.8	-746.6	-633.4	-364.1	-9.0	259.8
Other sectors	2 253.0	1 632.2	320.2	-53.4	-593.0	1 958.4
Net incurred liabilities	-232.1	992.8	319.4	-548.6	604.9	617.1
Government of the RK and the National Bank of the RK	1 270.8	854.9	-119.8	-162.9	633.2	504.4
Banks	-96.9	-167.3	344.4	-155.1	-21.4	-335.2
Other sectors	-1 406.0	305.2	94.8	-230.6	-6.9	448.0
Financial derivatives (net)	-81.3	71.2	144.8	-64.5	2.4	-11.5

	2019	2020	2020			
			l quarter	II quarter	III quarter	IV quarter
Other investments	2 063.5	-1 794.1	2 981.9	-1 527.7	2 040.5	-5 288.7
Other equity participation instruments (net)	17.5	31.4	30.9	2.3	-1.1	-0.6
Medium- and long-term debt instruments	-326.6	-2 020.7	942.9	-652.4	118.2	-2 429.4
Net acquisition of financial assets	59.8	-586.0	410.1	30.3	-211.1	-815.3
Government of the RK and the National Bank of the RK	-4.4	-6.5	-1.5	-1.7	-1.6	-1,7
Banks	119.1	142.4	138.1	-20.4	24.8	0.0
Other sectors	-54.9	-721.9	273.6	52.4	-234.3	-813.5
Net incurred liabilities	386.4	1 434.7	-532.8	682.7	-329.3	1 614.1
Government of the RK and the National Bank of the RK	-717.8	356.7	-342.9	-63.4	-337.0	1 100.0
Banks	-512.1	137.7	22.8	189.7	-127.2	52.3
Other sectors	1 616.3	940.4	-212.7	556.4	134.9	461.7
Short-term debt instruments	2 372.6	195.2	2 008.2	-877.6	1 923.4	-2 858.8
Net acquisition of financial assets	3 355.9	1 433.2	1 985.5	-173.3	2 583.0	-2 962.1
Net incurred liabilities	983.4	1 238.0	-22.6	704.3	659.5	-103.3
Errors and omissions	2 114.4	-9 877.0	-3 452.4	-3 030.6	482.9	-3 876.9
Overall balance	6 599.7	889.7	702.1	-1 309.6	1 673.1	-175.9
Financing	-6 59.7	-889.7	-702.1	1 309.6	-1 673.1	175.9
Reserve assets of the NBK	-6 599.7	-889.7	-702.1	1 309.6	-1 673.1	175.9
IMF credits	0.0	0.0	0.0	0.0	0.0	0.0
Exclusive Financing	0.0	0.0	0.0	0.0	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, 2019	As at January 1, 2020	As at April 1, 2020	As at July 1, 2020	As at October 1, 2020	As at January 1, 2021
External debt	159 796.6	158 561.1	154 816.4	159 996.5	160 916.5	163 360.5
Short-term	8 150.5	8 801.1	8 566.8	9 224.4	9 506.1	9 999.1
Long-term	151 646.2	149 760.0	146 249.6	150 772.0	151 410.4	153 361.4
General Government	11 554.8	12 417.6	11 428.4	11 834.6	12 295.3	13 884.7
Short-term	17.9	14.9	16.9	19.0	22.3	25.0
Cash 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
Credits and loans	0.0	0.0	0.0	0.0	0.0	0.0
Trade credits and advances	17.9	14.9	16.9	19.0	22.3	25.0
Other liabilities	0.0	0.0	0.0	0.0	0.0	0.0
Long-term	11 536.9	12 402.7	11 411.4	11 815.6	12 273.0	13 859.7
Special Drawing Rights	0.0	0.0	0.0	0.0	0.0	0.0
Cash and deposits	0.0	0.0	0.0	0.0	0.0	0.0
Debt securities ¹	4 554.3	6 133.4	5 479.4	5 941.9	6 728.7	7 201.9
Credits and loans	6 982.6	6 269.3	5 932.0	5 873.8	5 544.3	6 657.8
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	770.4	891.1	949.9	825.9	805.6	1 329.4
Short-term	286.2	409.7	472.8	345.6	315.7	828.0
Cash and deposits	6.9	3.9	4.8	4.4	5.4	2.6
Debt securities ¹	275.3	401.6	463.2	335.6	305.2	821.2
Credits and loans	0.0	0.0	0.0	0.0	0.0	0.0
Trade credits and advances	4.0	4.2	4.7	5.6	5.1	4.2
Other liabilities	0.0	0.0	0.0	0.0	0.0	0.0
Long-term	484.2	481.4	477.1	480.3	489.9	501.3
Special Drawing Rights	483.2	480.4	476.2	479.4	488.9	500.4
Cash 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
Credits and 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	5 752.0	4 809.5	4 781.6	5 201.9	5 176.8	4 968.0
Short-term	997.1	1 097.7	942.5	1 187.6	1 373.4	1 312.4
Cash and deposits	704.2	863.6	757.6	916.3	1 148.9	1 149.4
Debt securities ¹	0.0	0.0	0.0	0.0	0.0	0.0
Credits and loans	132.1	95.5	30.7	61.8	0.4	23.9
Trade credits and advances	0.0	0.0	0.0	0.0	0.0	0.0
Other liabilities	160.8	138.6	154.2	209.5	224.1	139.1
Long-term	4 755.0	3 711.8	3 839.1	4 014.3	3 803.4	3 655.5
Cash and deposits	306.1	237.4	203.2	256.2	188.9	244.0

	As at January 1, 2019	As at January 1, 2020	As at April 1, 2020	As at July 1, 2020	As at October 1, 2020	As at January 1, 2021
Debt securities ¹	2 441.9	1 875.9	2 011.8	1 983.7	1 926.4	1 722.4
Credits and loans	2 006.9	1 598.5	1 624.1	1 774.4	1 688.1	1 689.1
Trade credits and advances	0.0	0.0	0.0	0.0	0.0	0.0
Other liabilities²	0.0	0.0	0.0	0.0	0.0	0.0
Other sectors ³	39 661,7	41 026,8	37 662,8	40 095,6	41 118,7	42 022,2
Short-term	6 849.3	7 278.8	7 134.6	7 672.3	7 794.7	7 833.7
Cash 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
Credits and loans	616.3	501.4	501.6	621.0	482.0	473.1
Trade credits and advances	6 124.2	6 740.5	6 559.0	6 983.7	7 282.8	7 307.9
Other liabilities	108.7	36.9	74.0	67.6	29.9	52.7
Long-term	32 812.4	33 748.0	30 528.2	32 423.3	33 324.0	34 188.4
Cash and deposits	0.0	0.0	0.0	0.0	0.0	0.0
Debt securities ¹	10 097.8	9 491.1	8 083.0	9 278.3	10 235.9	10 540.2
Credits and loans	20 680.9	22 304.5	20 500.9	21 082.8	21 164.7	21 705.8
Trade credits and advances	1 831.8	1 741.5	1 679.0	1 774.4	1 650.9	1 680.2
Other liabilities ²	201.9	211.0	265.3	287.7	272.5	262.2
Other financial organizations	2 210.0	1 411.9	1 132.1	1 171.7	1 091.4	1 241.5
Short-term	64.6	49.6	82.2	85.3	57.9	35.8
Long-term	2 145.4	1 362.3	1 049.9	1 086.5	1 033.6	1 205.7
Non-financial organizations, households and non- commercial organizations providing services to households	37 451.7	39 614.9	36 530.7	38 923.9	40 027.3	40 780.7
Short-term	6 784.7	7 229.2	7 052.4	7 587.1	7 736.8	7 797.9
Long-term	30 667.0	32 385.8	29 478.3	31 336.8	32 290.5	32 982.8
Direct investments: Intercompany debt	102 057.7	99 416.1	99 993.8	102 038.5	101 520.1	101 156.3
Liabilities of Kazakhstani direct investment companies to foreign direct investors	80 856.6	81 305.3	81 220.0	82 071.2	81 582.3	81 239.6
Liabilities of Kazakhstani direct investors to foreign direct investment companies (reverse investment)	6 571.9	6 961.7	7 707.1	9 163.9	9 730.7	9 863.8
Liabilities of Kazakhstani enterprises to foreign sister enterprises	14 629.3	11 149.0	11 066.6	10 803.4	10 207.0	10 052. 9

¹ Debt securities are recorded at market value (if available). ² Include insurance and pension schemes and standard guarantee programs as well as other long-term liabilities from the structure of an international investment position.

³ Other sectors do not include intercompany debt, 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 Relative Parameters

Item	2019	I quarter of 2020	II quarter of 2020	III quarter of 2020	IV quarter of 2020	2020
	Abs	solute Parameters	(milion US Dollar	s)		
1. External debt (estimate at end-period)	158 561.1	154 816.4	159 996.5	160 916.5	163 360.5	163 360.5
including intercompany debt	99 416.1	99 993.8	102 038.5	101 520.1	101 156.3	101 156.3
2. External debt, excluding intercompany debt (estimate at end-period)	59 145.0	54 822.6	57 958.0	59 396.5	62 204.2	62 204.2
3. Payments for long-term external debt extinction and servicing (including intercompany debt)	37 274.7	6 689.7	7 588.7	12 571.4	7 207.8	34 057.6
4. Payments for long-term external debt extinction and servicing (excluding intercompany debt)	22 379.8	2 993.5	4 039.7	3 771.3	3 744.4	14 548.8
-	_	Relative Pa	rameters	_	-	
External debt per capita (US Dollars, excluding intercompany debt)1	3 174.3	2 929.9	3 089.4	3 157.8	3 295.2	3 295.2
2. External debt to GDP (%, including intercompany debt)	87.3	83.6	89.7	90.7	96.5	96.2
3. External debt to GDP (%, excluding intercompany debt)	32.6	29.6	32.5	33.5	36.7	36.6
4. External debt to exports of goods and services for 12 months (%, including intercompany debt)	240.4	231.6	256.3	287.0	315.7	315.7
5. External debt to exports of goods and services for 12 months (%, excluding intercompany debt)	89.7	82.0	92.8	105.9	120.2	120.2
6. Payments for long-term external debt extinction and servicing to exports of goods and services for the period (%, including intercompany debt)	56.5	42.1	59.5	119.9	57.2	65.8
7. Payments for long-term external debt extinction and servicing to exports of goods and services for the period (%, excluding intercompany debt)	33.9	18.8	31.7	36.0	29.7	28.1
8. Interest payments to exports of goods and services for the period (%)	11.2	10.8	12.3	13.2	10.5	11.6
9. National Bank's international reserves to short-term external debt (%)	329.0	347.6	356.6	355.4	356.4	356.4

Item	2019	I quarter of 2020	II quarter of 2020	III quarter of 2020	IV quarter of 2020	2020
		Memo I	tems:			
Population (thousand individuals) ¹	18 632.2	18 711.2	18 760.2	18 809.2	18 877.1	18 877.1
GDP (billion tenge), for the period ²	69 532.6	15 093.3	13 306.3	17 403.7	24 330.8	70 134.1
GDP for 12 months (billion US Dollars) ³	181.7	185.1	178.3	177.4	169.3	169.8
Exports of goods and services for the period	65 947.5	15 902.5	12 755.5	10 484.8	12 603.6	51 746.5
Exports of goods and services for 12 months	65 947.5	66 860.6	62 421.4	56 064.9	51 746.5	51 746.5

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



Preliminary data from the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan for 2020 published on February 15, 2021.
 GDP in the US Dollars for the calendar year – data of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. GDP in

³ GDP 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	– a 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
IMF	– the International Monetary Fund
CIS	– the Commonwealth of Independent States





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MANAGEMENT STATEMENT OF RESPONSIBILITY FOR PREPARATION AND APPROVAL OF THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2020

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 2020, 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 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 fraud and other irregularities.

The consolidated financial statements for the year ended 31 December 2020 were approved by the National Bank's Management Board on 5 April 2021.

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

E.A. Dossaev Governor

5 April 2021 Nur-Sultan, Kazakhstan S.K. Rakhmetova Chief Accountant

5 April 2021 Nur-Sultan, Kazakhstan





«КПМГ Аудит» жауапкершілігі шектеулі серіктестік Қазақстан, A25D6T5 Алматы, Достық д-лы 180, Тел.: +7 (727) 298-08-98

KPMG Audit LLC 180 Dostyk Avenue, Almaty, Kazakhstan, A25D6T5 E-mail: company@kpmg.kz

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 2020, 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 2020, 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 2020 and 31 December 2019 at cost on the basis that it was unable to obtain a reliable measurement of their fair value. A reliable measurement 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, comprehensive income, retained earnings and reserve for changes in fair value of financial assets as at and for the years ended 31 December 2020 and 31 December 2019 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 КРМG International Limited жекеше ағылшын компаниясының құрамына кіретін КРМG тәуелсіз фирмалары жаһандық ұйымының қатысушысы.



Emphasis of Matter

We draw attention to Note 2(e) to the consolidated financial statements which indicates that the comparative information presented as at and for the year ended 31 December 2019 has been restated. Our opinion is not modified in respect of this matter.

Other matter

As part of our audit of the consolidated financial statements as at and for the year ended 31 December 2020, we audited the adjustments described in Note 2(e) that were applied to restate the comparative information presented as at and for the year ended 31 December 2019. In our opinion, the adjustments described in Note 2(e) are appropriate and have been properly applied. Our opinion for the consolidated financial statements as at and for the year ended 31 December 2019 dated 6 April 2020 was qualified in respect of this matter.

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 as a result of the outbreak of the coronavirus in 2020.

We paid particular attention to 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 their fair value on initial recognition.

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 placements and loans with banks and other financial institutions, and disposal of debt securities issued by the Fund of Problem Loans JSC ("FPL bonds").

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 forecast cash flows and compared the inputs, such as discount rates, against industry, financial and economic data from the external sources.

We have assessed the key assumptions used as a basis for estimation of the carrying and fair values of the FPL bonds as at the disposal date, including the forecasted cash flows and discount rate, for the purpose of estimation of the expenses on rehabilitation of the banking sector and the economy.

We assessed whether the consolidated financial statements disclosures 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. We also assessed whether the transaction on disposal of FPL bonds is appropriately disclosed in the consolidated financial statements and the disclosure reflects the key judgments and estimates as at the disposal date.



Expected credit losses (ECL) on financial assets measured at amortised cost

Key audit matter

How the matter was addressed in our audit

Refer to Notes 12, 19, 23 and 25 to the consolidated financial statements.

The use of financial instruments is a core business of the National Bank.

Financial assets measured at amortised cost represent 31% of total assets and are stated net of allowance for expected credit losses that is estimated on a regular basis and is sensitive to assumptions used.

The ECL valuation model requires management to apply professional judgement and to make assumptions related to the following key areas:

- timely identification of significant increase in credit risk and default events (allocation between stages 1, 2 and 3 in accordance with the IFRS 9);
- assessment of probability of default (PD) and loss given default (LGD);
- assessment of add-on adjustment to account for different scenarios and forward-looking information;
- assessment of expected cash flows forecast for financial assets which are classified as credit-impaired.

There is an increased risk of material misstatement of ECL in the current year due to the higher uncertainty related to judgements and estimates resulting from COVID-19.

Due to the significant volume of financial assets measured at amortised cost and related estimation uncertainty, this area is a key audit matter.

We analysed the key aspects of the National Bank's methodology and policies related to the ECL estimate for compliance with the requirements of IFRS 9. To analyse adequacy of professional judgement and assumptions made by

To analyse adequacy of professional judgement and assumptions made by the management in relation to ECL estimate, we performed the following procedures:

- We tested design and implementation of controls over estimation of ECL on financial assets.
- For material financial assets we tested whether Stages are correctly assigned by the National Bank by analysing external credit ratings, if available, and financial and non-financial information, as well as assumptions and professional judgements applied by the National Bank.
- For material financial assets with external credit ratings we checked PD and LGD parameters by comparing to externally available information.
- ▶ We also analysed the overall adequacy of the adjustment to account for various scenarios and forward-looking information and compared it with our estimates taking into account the current and future economic situation and operating conditions of counteragents. As part of this work we tested the appropriateness of the National Bank's assessment of the economic uncertainty related to COVID-19.
- ▶ For credit-impaired loans we assessed adequacy of ECL allowance by critically assessing assumptions used by the National Bank to estimate expected cash flows, including estimated proceeds from realisation of collateral and their timing. We compared assumptions used by the National Bank for these loans with industry, financial and economic data from available public sources.

We also assessed whether the consolidated financial statements disclosures appropriately reflect the National Bank's exposure to credit risk.

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 2020 (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 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 the Basis of Preparation, 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.





- ▶ 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. MФ-0000096 of 27 August 2012

KPMG Audit LLC

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

Sergey Dementyey

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

5 April 2021

CONSOLIDATED STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 31 DECEMBER 2020

	Note	2020 '000 KZT	Restated* 2019 '000 KZT
Interest income calculated using the effective interest method	5	367,183,664	297,980,885
Interest expense	5	(464,594,508)	(413,937,514)
Net interest loss		(97,410,844)	(115,956,629)
Fee and commission income	6	24,760,756	26,309,041
Fee and commission expense	7	(6,366,774)	(7,257,061)
Net fee and commission income		18,393,982	19,051,980
Net gain on financial instruments at fair value through profit or loss	8	95,283,203	131,701,101
Net gain on investment securities at fair value through other comprehensive income	9	40,759,957	33,229,717
Share of profit/(loss) of associates		3,389,666	(5,032)
Expenses on rehabilitation of the banking sector and the economy	10	(936,370,397)	(652,738,413)
Other operating (expenses) income, net	11	(26,117,161)	572,094
Operating expenses		(902,071,594)	(584,145,182)
Allowance for expected credit losses	12	(162,794,967)	(244,227,189)
Provisions for estimated liabilities	33	(37,648,928)	(14,714,034)
Banknotes and coins production expenses	13	(30,558,468)	(5,311,454)
Personnel expenses	14	(23,780,793)	(29,355,016)
Depreciation and amortization		(4,130,697)	(3,748,942)
Other general and administrative expenses	15	(48,913,667)	(17,210,915)
Loss before income tax		(1,209,899,114)	(898,712,732)
Income tax benefit	16	89,716,100	120,925,766
Loss for the year		(1,120,183,014)	(777,786,966)
(Loss) profit attributable to:			
- Equity holders of the National Bank	-	(1,120,376,050)	(777,963,572)
- Non-controlling interests		193,036	176,606
Loss for the year		(1,120,183,014)	(777,786,966)

^{*} See Note 2(e).

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

E. A. Dossaev Governor

5 April 2021 Nur-Sultan, Kazakhstan S. K. Rakhmetova Chief Accountant

5 April 2021 Nur-Sultan, Kazakhstan

The notes set out on pages 89 to 189 form an integral part of these consolidated financial statements.



CONSOLIDATED STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 31 DECEMBER 2020

	2020 '000 KZT	Restated* 2019 '000 KZT
Loss for the year	(1,120,183,014)	(777,786,966)
Other comprehensive income net of tax		
Items that are or may be reclassified subsequently to profit or loss:		
Movement in fair value reserve (debt instruments):	-	
- Net change in fair value	51,464,154	77,909,018
- Net amount transferred to profit or loss	(32,933,329)	(29,687,083)
Total items that are or may be reclassified subsequently to profit or loss:	18,530,825	48,221,935
Items that will not be reclassified to profit or loss:	***************************************	
Movement in fair value reserve (equity instruments)	2,469,575	3,809,564
Foreign currency revaluation reserve	125,869,458	(15,376,528)
Precious metals revaluation reserve	2,652,217,250	1,117,170,963
Total items that will not be reclassified to profit or loss	2,780,556,283	1,105,603,999
Other comprehensive income for the year, net of income tax	2,799,087,108	1,153,825,934
Total comprehensive income for the year	1,678,904,094	376,038,968
Total comprehensive income attributable to:		
- Equity holders of the National Bank	1,678,711,058	375,862,362
- Non-controlling interests	193,036	176,606
Total comprehensive income for the year	1,678,904,094	376,038,968

^{*} See Note 2(e).

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

E. A. Dossaev Governor

5 April 2021 Nur-Sultan, Kazakhstan

S. K. Rakhmetova Chief Accountant

5 April 2021 Nur-Sultan, Kazakhstan

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2020

	Note	2020 '000 KZT	Restated* 2019 '000 KZT
ASSETS			
Cash on hand in foreign currency	17	122,879,854	113,367,726
Gold	18	9,946,269,671	7,230,140,962
Placements and loans with banks and other financial institutions	19	4,630,905,561	2,580,761,092
Financial instruments under management at fair value through profit or loss	20	633,025,926	367,833,190
Reverse repurchase agreements	21	20,012,508	145,868,206
Investment securities measured at fair value through other comprehensive income			
- Pledged under sale and repurchase agreements	22	94,346,826	27,284,433
- Not pledged under sale and repurchase agreements	22	3,489,090,231	3,249,968,794
Investment securities measured at amortised cost	23	1,121,943,735	985,792,527
Investments in associates		5,683,549	2,291,347
Property, plant and equipment and intangible assets	24	70,335,177	65,678,843
Current tax asset	•	2,481,329	1,157,892
Deferred tax assets	16	325,613,503	234,344,611
Other assets	25	999,301,782	327,058,664
Total assets	•	21,461,889,652	15,331,548,287
LIABILITIES			
Currency in circulation	26	3,250,868,479	2,688,747,786
Deposits and balances from banks and other financial institutions	27	7,328,415,884	4,385,426,201
Financial instruments under management at fair value through profit or loss	20	968,165	934,215
Repurchase agreements	28	100,597,147	27,941,316
Current accounts of the National Fund of the Republic of Kazakhstan	29	441,555,267	724,730,007
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	30	1,432,152,238	397,535,424
Customer accounts	31	239,047,013	182,887,423
Debt securities issued	32	3,645,971,357	3,618,820,899
Estimated liabilities	33	53,056,189	33,162,428
Current tax liability		166	146
Deferred tax liabilities	16	2,406,638	2,483,478
Other liabilities	34	33,833,600	26,329,501
Total liabilities	•	16,528,872,143	12,088,998,824

	Note	2020 '000 KZT	Restated* 2019 '000 KZT
EQUITY		000 K21	000 N21
Charter capital	35	20,000,000	20,000,000
Special guarantee reserve	35	598,376,004	500,764,758
Other provisions	-	4,032,306	4,032,306
Property and equipment revaluation reserve	-	23,184,009	23,623,561
Reserve for changes in fair value of financial assets	-	41,861,301	22,271,185
Revaluation reserve for foreign currency and precious metals		7,633,270,564	4,855,183,856
Accumulated losses	-	(3,389,104,209)	(2,184,530,568)
Total equity attributable to equity holders of the National Bank		4,931,619,975	3,241,345,098
Non-controlling interests	35	1,397,534	1,204,365
Total equity		4,933,017,509	3,242,549,463
Total liabilities and equity		21,461,889,652	15,331,548,287

^{*} See Note 2(e).

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

E. A. Dossaev Governor

5 April 2021 Nur-Sultan, Kazakhstan

S. K. Rakhmetova Chief Accountant

5 April 2021 Nur-Sultan, Kazakhstan

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2020

	2020 '000 KZT	Restated* 2019 '000 KZT
CASH FLOWS FROM OPERATING ACTIVITIES	000 KZ I	000 KZ I
Loss before income tax	(1,209,899,114)	(898,712,732)
Adjustments for:	(-,,,-,	(0.0),,
Depreciation and amortization	6,545,036	7,266,975
Allowance for expected credit losses	162,717,766	244,188,587
Provisions for estimated liabilities	37,648,928	14,714,034
Impairment losses on other non-financial assets	77,201	38,602
Loss on disposal of inventories	7,076	14,953
Amortisation of discount on debt securities issued	348,204,505	307,960,426
Amortisation of premium and discount on financial assets	(3,516,723)	(3,192,811)
Unrealised gain on financial instruments at fair value through profit or loss	(46,888,758)	(97,124,135)
Share of (profit)/loss of associates	(3,389,666)	5,032
Loss on combination /disposal of investments in the organisation		682,614
Cash used in operating activities before changes in operating assets and liabilities	(708,493,749)	(424,158,455)
(Increase)/decrease in operating assets		
Gold	(61,954,557)	(582,226,591)
Placements and loans with banks and other financial institutions	(854,544,624)	489,309,463
Financial instruments under management at fair value through profit or loss	(105,559,720)	(115,440,596)
Reverse repurchase agreements	_	11,451,500
Investment securities measured at fair value through other comprehensive income	(72,176,030)	1,741,525,215
Other assets	(680,306,384)	(253,504,771)
Increase/(decrease) in operating liabilities		
Currency in circulation	562,120,693	69,418,109
Deposits and balances from banks and other financial institutions	2,628,278,622	(1,437,239,647)
Financial instruments under management at fair value through profit or loss	(14,793)	(564,053)
Repurchase agreements	72,655,831	(107,885,727)
Current accounts of the National Fund of the Republic of Kazakhstan	(283,174,740)	17,405,883
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	1,032,140,906	(42,768,848)
Customer accounts	54,272,625	(14,851,237)
Estimated liabilities	(17,755,167)	(37,515,134)
Other liabilities	4,797,891	(32,537,877)
Net cash provided from/(used in) operating activities before income tax paid	1,570,286,804	(719,582,766)
Income tax paid	(1,790,137)	(1,158,330)
Net cash from/(used in) operating activities	1,568,496,667	(720,741,096)

	2020 '000 KZT	Restated* 2019 '000 KZT
CASH FLOWS FROM INVESTING ACTIVITIES	000 NZ1	000 KET
Purchase of investment securities measured at amortised cost	(187,567,093)	(514,100,657)
Repayment of investment securities measured at amortised cost	64,616,231	211,992,712
Acquisition of property, plant and equipment and intangible assets	(8,465,639)	(7,851,147)
Proceeds from sale of property, plant and equipment and intangible assets	73,995	2,670,523
Disposal of subsidiaries	_	(2,197,951)
Proceeds from disposal of investment in associates	-	170,078
Net cash used in investing activities	(131,342,506)	(309,316,442)
CASH FLOWS FROM FINANCING ACTIVITIES	*	
Proceeds from debt securities issued	14,795,265,568	30,600,920,476
Redemption of debt securities issued	(14,783,505,350)	(31,124,090,128)
Accounts received on debt securities issued (Note 25)	_	884,695,840
Interest paid on debt securities issued	(334,704,804)	(279,370,787)
Net cash (used in)/from financing activities	(322,944,586)	82,155,401
Net increase/(decrease) in cash and cash equivalents	1,114,209,575	(947,902,137)
Effect of movements in exchange rates on cash and cash equivalents	71,054,468	(31,591,209)
Cash and cash equivalents at the beginning of the year, gross carrying amount	1,198,362,789	2,177,856,135
Cash and cash equivalents at the end of the year, gross carrying amount (Note 17)	2,383,626,832	1,198,362,789

Interest paid and received during the year ended 31 December 2020 amounted to KZT 454,858,457 thousand and KZT 287,442,537 thousand, respectively (31 December 2019: KZT 412,368,001 thousand and KZT 186,897,868 thousand, respectively).

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

E. A. Dossaev Governor

5 April 2021 Nur-Sultan, Kazakhstan

S. K. Rakhmetova Chief Accountant

5 April 2021 Nur-Sultan, Kazakhstan

^{*} See Note 2(e).

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2020

'000 KZT			Equity attril	Equity attributable to equity holders of the National Bank	olders of the Nati	ional Bank				
	Charter capital	Special guarantee reserve	Other	Property and equipment revaluation reserve	Reserve for changes in fair value of financial assets	Revaluation reserve for foreign currency and precious metals	Accumulated losses	Total	Non- controlling interests	Total equity
Balance at 1 January 2020	20,000,000	500,764,758	4,032,306	23,623,561	22,271,185	4,855,183,856	(2,184,530,568)	3,241,345,098	1,204,365	3,242,549,463
Restated prior year retained earnings due to fair value remeasurement of certain assets *	1	I	1	ı	ı	ı	11,296,364	11,296,364	I	11,296,364
Restated balance as 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		1								
Loss for the year	1	ı	-	ı	ı	ı	(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	-	1	1	1	51,464,154	1	-	51,464,154	1	51,464,154
Net change in fair value transferred to profit or loss	T	ı	T	ı	(32,933,329)	T	I	(32,933,329)	1	(32,933,329)
Movement in fair value reserve (equity instruments):										
Net change in fair value	1	I	1	1	1,059,291	1	1,410,284	2,469,575	1	2,469,575
Foreign currency revaluation reserve	1	1	1	1	1	125,869,458	ı	125,869,458	ı	125,869,458
Precious metals revaluation reserve	ı	ı	ı	ı	ı	2,652,217,250	l	2,652,217,250	ı	2,652,217,250
Total other comprehensive income	1	ı	-	1	19,590,116	2,778,086,708	1,410,284	2,799,087,108	ı	2,799,087,108
Total comprehensive income for the year	1	1	ı	ı	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	l	l	l	(439,552)	l	l	443,128	3,576	133	3,709
Transactions with owners recorded directly in equity:										
Addition to special guarantee reserve	-	97,611,246	ı	-	ı	1	(97,611,246)	-	ı	1
Additional paid-in capital of subsidiaries	1	1	1	1	1	1	2,041	2,041	ı	2,041
Disposal of the subsidiary	1	1	ı	1	ı	1	261,838	261,838	1	261,838
Total transactions with owners	ı	97,611,246	I	ı	ı	ı	(97,347,367)	263,879	1	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

* Due to the effect being not material, restatement was reflected only in the consolidated statement of changes in equity.



'000 KZT				Equity attributabl	le to equity holde	Equity attributable to equity holders of the National Bank	¥			
	Charter capital	Special guarantee reserve	Other	Property and equipment revaluation reserve	Reserve for changes in fair value of financial assets	Revaluation reserve for foreign currency and precious metals	Accumulated losses	Total	Non- controlling interests	Total equity
Balance at 1 January 2019	20,000,000	495,014,899	4,823,888	24,820,960	(29,757,356)	3,753,931,172	(1,403,996,916)	2,864,836,647	5,653,505	2,870,490,152
Restated prior year retained earnings due to fair value remeasurement of certain assets *	ı	1	ı	l	l	l	2,197,527	2,197,527	l	2,197,527
Restated balance as at 1 January 2019	20,000,000	495,014,899	4,823,888	24,820,960	(29,757,356)	3,753,931,172	(1,401,799,389)	2,867,034,174	5,653,505	2,872,687,679
Total comprehensive income										
Loss for the year, restated*	1	1	ı	I	I	1	(777,963,572)	(777,963,572)	176,606	(777,786,966)
Other comprehensive income										
Movement in fair value reserve (debt instruments):										
Net change in fair value	1	1	1	1	77,909,018	1	1	77,909,018	ı	77,909,018
Net change in fair value transferred to profit or loss	1	l	l	l	(29,687,083)	l	l	(29,687,083)	l	(29,687,083)
Movement in fair value reserve (equity instruments):										
Net change in fair value	ı	1	1	I	3,809,564	ı	1	3,809,564	ı	3,809,564
Foreign currency revaluation reserve	1	1	ı	1	ı	(15,376,528)	1	(15,376,528)	ı	(15,376,528)
Precious metals revaluation reserve	ı	1	ı	1	1	1,117,170,963	ı	1,117,170,963	ı	1,117,170,963
Total other comprehensive income	1	1	1	1	52,031,499	1,101,794,435	1	1,153,825,934	ı	1,153,825,934
Total comprehensive income for the year (restated*)	I	I	I	I	52,031,499	1,101,794,435	(777,963,572)	375,862,362	176,606	376,038,968
Transfer of revaluation reserve resulting from depreciation and disposals	-	-	-	(1,107,272)	_	_	1,114,517	7,245	(460)	6,785

* Due to the effect being not material, restatement was reflected only in the consolidated statement of changes in equity.

000 KZT			Equity attrik	butable to equity h	Equity attributable to equity holders of the National Bank	onal Bank			
	Charter capital	Special	Other	Property and	Reserve for	Revaluation	Accumulated	Total Non-controlling	Total equity
		guarantee	reserves	equipment	changes in	reserve	sessol	interests	
		reserve		revaluation	fair value of	for foreign			
				reserve	financial assets	currency and			
						precious metals			

directly in equity:										
Addition to special guarantee reserve	1	5,749,859	1	1	1	1		1	ı	I
Gratuitous transfer of property under community ownership	-	l		l	l	l	(6,108) (6,108) (6,108) - (6,108)	(6,108)	I	(6,108)
. <u>S</u>	diaries – –	ı		ı	ı	ı	660,665	660,665	(142,263)	518,402
Disposal of the subsidiary –	1	1		(90,127)	(2,958)	(541,751)	(791,582) (90,127) (2,958) (541,751) (786,822)	(2,213,240)		(4,483,023) (6,696,263)
Total transactions with owners – 5,749,859	ı	5,749,859		(791,582) (90,127) (2,958)	(2,958)	(541,751)	(541,751) (5,882,124)		Ŭ	(4,625,286) (6,183,969)
Balance at 31 December 2019, restated*	20,000,000	500,764,758	4,032,306	23,623,561	22,271,185	4,855,183,856	(2,184,530,568)			1,204,365 3,242,549,463

* See Note 2(e).

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

E. A. Dossaev Governor 5 April 2021 Nur-Sultan, Kazakhstan

S. K. Rakhmetova Chief Accountant 5 April 2021 Nur-Sultan, Kazakhstan

The notes set out on pages 89 to 189 form an integral part of these consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2020

1. INTRODUCTION

(a) 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 the National Bank of the Republic of Kazakhstan.

The primary role of the NBK is ensuring price stability in the Republic of Kazakhstan. The NBK has the following functions: 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: development and implementation of 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; currency regulation and currency control in the Republic of Kazakhstan; management of the foreign currency assets and precious metals; 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; trust management of the pension assets of "Unified National Pension Fund" JSC ("UNPF") based on the trust agreement entered into between the NBK and the unified pension fund; 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 2020 the NBK operates 18 branches, 1 Representative office in Almaty and has 11 subsidiaries located in the Republic of Kazakhstan.

All NBK subsidiaries that are registered in the Republic of Kazakhstan are as follows:

Name	Year of	Principal activity	Owners	ship, %
	Estab-lishment		2020	2019
RSE "Kazakhstan Mint of the National Bank of the Republic of Kazakhstan"	1994	Coins manufacturing	100.00	100.00
RSE "Kazakhstan Interbank Settlement Center of the National Bank of the Republic of Kazakhstan"	1996	Electronic money transfers	100.00	100.00
RSE "Bank Service Bureau of the National Bank of the Republic of Kazakhstan"	1996	Software service and development	100.00	100.00
Kazakhstan Deposit Insurance 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
The Training Center of the National Bank of the Republic of Kazakhstan JSC	2007	Delivering professional training programmes of postgraduate education	100.00	100.00

1. INTRODUCTION, CONTINUED

(a) Organisation and operations, continued

Name	Year of	Principal activity	Ownership, %	
	Estab-lishment		2020	2019
Center of activities maintenance of the National Bank of Kazakhstan JSC	2011	Transportation services, administration of assets	100.00	100.00
National Investment Corporation of the National Bank of Kazakhstan JSC (the "NIC NBK" JSC)	2012	Management of assets of the National Fund of the Republic of Kazakhstan and gold and foreign currency assets of the NBK, management of pension assets	100.00	100.00
The State Credit Bureau JSC	2012	Maintaining credit histories and delivering credit reports	100.00	100.00
Kazakhstan Sustainability Fund JSC (the "KSF JSC")	2017	Ensuring financial stability of the banking sector and the economy through financial support of second-tier banks	100.00	100.00
Central Securities Depository JSC	1996	Depository operations	63.24	63.24
Mortgage Organisation "Baspana" JSC	2018	Ensuring accessibility of residential mortgage loans for population	-	100.00

In December 2018 Kazakhstan Stock Exchange JSC (hereinafter, "KASE") made a decision to place common shares at Moscow Exchange MICEX-RTS PJSC, and as a consequence, in 2019, the ownership share of the NBK in the capital of KASE reduced to less than 50% of voting shares. As a result, financial information of KASE were excluded from the consolidated financial statements of the National Bank. Starting from 2019, investments in KASE are classified as investments in associate.

Based on the Resolution of the NBK dated 23 December 2019 it was decided to reorganise MO Baspana JSC through its merger with another subsidiary of NBK, KSF JSC, in the first quarter of 2020. The merger occurred in February 2020.

Due to relocation of the NBK to Nur-Sultan city in June 2020 it was determined to open the Permanent Representation Office of the National Bank in Almaty city (hereinafter, the "Office"), with the structure of the Office and Regulation on the Office being approved.

(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. The legal, tax and regulatory frameworks continue development, but are subject to varying interpretations and frequent changes which together with other legal and fiscal impediments contribute to the challenges faced by entities operating in Kazakhstan.

The first months of 2020 have seen significant global market turmoil triggered by the outbreak of the coronavirus.

The World Health Organization declared on 11 March 2020 the coronavirus (COVID-19) outbreak a pandemic. Responding to the potentially serious threat the COVID-19 presents to public health, for the purpose of protection of life and health of the citizens, a decision was made, pursuant to the legislation of the Republic of Kazakhstan, to introduce the state of emergency throughout the Republic of Kazakhstan for the period from 16 March 2020 to 12 May 2020. During the state of emergency period, regional authorities gradually introduced additional measures to enhance social distancing, including closing schools, universities, restaurants, cinemas, theatres and museums and sport facilities.

1. INTRODUCTION, CONTINUED

(b) Kazakhstan business environment, continued

Due to business disruption and lockdown in many countries, global oil demand drastically decreased leading to oversupply and sharp fall in oil prices. On 12 April 2020, major global oil producers including Kazakhstan agreed to a record cut in crude oil production for stabilizing the oil market.

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.

Management cannot preclude the possibility that extended lockdown periods, an escalation in severity of such measures, or a consequential adverse impact of such measures on the economic environment will have an adverse effect on the National Bank in the medium and longer term. The National Bank continues to monitor the situations closely and will respond to mitigate the impact of such events and circumstances as they occur.

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 to 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 valuation 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 it is recognised in other comprehensive income;
- ▶ in the financial statements certain transactions performed as part of implementation of the monetary policy and for promotion of the financial system stability are accounted for, presented and disclosed at amortised cost, cost or nominal cost depending on their economic substance and/or goals and objectives of the National Bank. In these consolidated financial statements such transactions comprise swaps with second-tier banks and other financial institutions, which are derivatives but are presented as 'placements and loans with banks and other financial institutions' and 'placements of banks and other financial institutions' (Notes 19 and 27) at nominal cost;

BASIS OF PREPARATION, CONTINUED

(a) Statement of compliance, continued

▶ 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, the 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.

Changes to significant accounting policies are described in Note 2(e).

(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 judgments

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.

Judgments

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(h)(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 judgments, 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 2020 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;
- ▶ impairment of placements and loans with banks and other financial institutions Note 19;
- ▶ financial assets and liabilities: fair value and accounting classifications Note 42.

(e) Adjustments for prior period

During the year ended 31 December 2020 it was identified that the consolidated financial statements for 2019 did not adequately value bonds issued by the Fund of Problem Loans JSC (the "FPL bonds") reflected under the caption "Placements and loans with banks and other financial institutions" as at 31 December 2019. During the year ended 31 December 2020 KSF JSC made a reliable assessment of the fair value of the FPL bonds as at the acquisition date and allowance for expected credit losses as at the reporting date. Except for the fair value adjustment of the FPL bonds, KSF JSC determined that the FPL bonds, which were purchased in 2018, were impaired and classified them as Stage 3 financial instruments for the year ended 31 December 2019. This classification resulted in the recognition of expenses for allowance for expected credit losses and the adjustments for the expenses on rehabilitation of the banking sector and the economy for the year ended 31 December 2019, and also the adjustments for the deferred tax assets as at 31 December 2019.

The following table summarises the impact of changes on the consolidated financial statements as at 31 December 2019 and for the year then ended:

'000 KZT	As previously reported	Impact of restatement	As restated
Consolidated statement of financial position as at 31 December 2019			
ASSETS			
Placements and loans with banks and other financial institutions	2,625,632,201	(44,871,109)	2,580,761,092
Deferred tax assets	248,828,889	(14,484,278)	234,344,611
Total assets	15,390,903,674	(59,355,387)	15,331,548,287
Equity			
Accumulated losses	(2,125,175,181)	(59,355,387)	(2,184,530,568)
Total equity attributable to equity holders of the National Bank	3,300,700,485	(59,355,387)	3,241,345,098
Total equity	3,301,904,850	(59,355,387)	3,242,549,463

2. BASIS OF PREPARATION, CONTINUED

(e) Adjustments for prior period, continued

'000 KZT	As previously reported	Impact of restatement	As restated
Consolidated statement of profit or loss for the year ended 31 December 2019			
Expenses on rehabilitation of the banking sector and the economy	(723,769,952)	71,031,539	(652,738,413)
Operating expenses	(655,176,721)	71,031,539	(584,145,182)
Allowance for expected credit losses	(128,324,541)	(115,902,648)	(244,227,189)
Loss before income tax	(853,841,623)	(44,871,109)	(898,712,732)
Income tax benefit	135,410,044	(14,484,278)	120,925,766
Loss for the year	(718,431,579)	(59,355,387)	(777,786,966)
Loss attributable to equity holders of the National Bank	(718,608,185)	(59,355,387)	(777,963,572)
Consolidated statement of comprehensive income for the year ended 31 December 2019			
Loss for the year	(718,431,579)	(59,355,387)	(777,786,966)
Total comprehensive income for the year	435,394,355	(59,355,387)	376,038,968
Total income attributable to equity holders of the National Bank	435,217,749	(59,355,387)	375,862,362
Consolidated statement of cash flows for the year ended 31 December 2019		-	
Loss before income tax	(853,841,623)	(44,871,109)	(898,712,732)
Adjustments for:			
Allowance for expected credit losses	128,285,939	115,902,648	244,188,587
Cash used in operating activities before changes in operating assets and liabilities	(495,189,994)	71,031,539	(424,158,455)
Increase/(decrease) in operating liabilities	•	-	
Placements and loans with banks and other financial institutions	560,341,002	(71,031,539)	489,309,463

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.

2. BASIS OF PREPARATION, CONTINUED

(a) Basis of consolidation, continued

(iii) Acquisitions and disposals of non-controlling interests

The National Bank accounts for the acquisitions and disposals of non-controlling interests as transactions with equity holders in their capacity as equity holders.

Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognised directly in equity and attributed to the owners of the National Bank.

(iv) Associates

Associates are those entities in which the National Bank has significant influence, but not control or joint 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.

(v) Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised gains arising from intra-group transactions, are eliminated in preparing the consolidated financial statements.

(vi) Non-controlling interests

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 statement of profit or loss and the consolidated statement of comprehensive income.

(b) Discontinued operations

A discontinued operation is a component of the National Bank's business, the operations and cash flows of which can be clearly distinguished from the rest of the National Bank and which:

- represents a separate major line of business or geographical area of operations;
- ▶ is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations; or
- ▶ is a subsidiary acquired exclusively with a view to resale.

Classification as a discontinued operation occurs upon disposal or when the operation meets the criteria to be classified as held for sale, if earlier. When an operation is classified as a discontinued operation, the comparative statement of profit or loss is presented as if the operation had been discontinued from the start of the comparative period.

(c) 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.

(d) Foreign currency

Transactions in foreign currencies are translated to the respective functional currencies of the National Bank entities at exchange rates at the dates of the transactions. 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. The foreign currency gain or loss on monetary items is the difference between amortised cost in the functional currency at the beginning of the period, adjusted for effective interest and payments during the period, and the amortised cost in foreign currency translated at the exchange rate at the end of the reporting period. Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are translated to the functional currency at the exchange rate at the date that the fair value was determined.

Non-monetary items in a foreign currency that are measured based on historical cost are translated to the functional currency using the exchange rate at the date of the transaction. Gain on foreign currency differences arising on retranslation are recognised 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 it is recognised in other comprehensive income. Revaluation of foreign currency is not transferred to profit or loss.

(e) 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. Cash and cash equivalents are recognised at amortised cost in the consolidated statement of financial position.

(f) Interest income and expense

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 creditimpaired 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 creditadjusted 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.

(f) Interest income and expenses, continued

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 expected credit 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.

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. The effective interest rate is also revised for fair value hedge adjustments at the date amortisation of the hedge adjustment begins.

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 3 (h)(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 instruments measured at fair value through other comprehensive income (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.

(g) Fee and commission income and expense

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(f)).

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 provided.

Fee and commission expenses include fees related to asset management, brokerage and custody services, 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.

(h) Financial instruments

(i) Classification of financial instruments

Financial assets

On initial recognition, a financial asset is classified as measured at: amortised cost, fair value through other comprehensive income (FVOCI) and fair value through profit or loss (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 fair value through profit or loss:

- ▶ 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.

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 fair value through other comprehensive income is derecognised, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss.

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.

(h) Financial instruments, continued

(i) Classification of financial instruments, continued

Financial assets, continued

Gains or 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 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 fair value through profit or loss.

In addition, on initial recognition the National Bank may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortised cost or at fair value through other comprehensive income as at fair value through profit or loss if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

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 NBK'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; and
- ▶ the frequency, volume and timing of sales in prior periods, the reasons for such sales and 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's stated objective for managing the financial assets is achieved and how cash flows are realised.

Financial assets that are held for trading or managed and whose performance is evaluated on a fair value basis are measured at FVTPL because they are neither held to collect contractual cash flows nor held both to collect contractual cash flows and to sell financial assets.

(h) Financial instruments, continued

(i) Classification of financial instruments, 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, 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 a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, 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, the National Bank 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 features); 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.

(ii) Derecognition

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.

(h) Financial instruments, continued

(ii) Derecognition, continued

Financial assets, continued

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.

In transactions in which the National Bank neither retains nor transfers substantially all of the risks and rewards of ownership of a financial asset and it retains control over the asset, the National Bank continues to recognise the asset to the extent of its continuing involvement, determined by the extent to which it is exposed to changes in the value of the transferred asset.

Financial liabilities

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

Any cumulative gain/loss recognised in other comprehensive income in respect of financial liabilities designated as at FVOCI is not recognised in profit or loss on derecognition of such financial liabilities (Note 3(I)).

(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.

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 analogizes 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:

- ▶ the change in the currency of a 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).

(h) Financial instruments, continued

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

Financial assets, continued

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 (see Note 3(f)).

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.

(h) Financial instruments, continued

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

Financial liabilities, continued

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.

(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;
- ▶ loan commitments 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 the credit risk has increased significantly since initial recognition, but the financial instruments are not credit-impaired) and 'Stage 3' financial instruments (if the financial instruments are credit-impaired).

Measurement of ECL

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; and
- 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.

(h) 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 creditimpaired 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.

(h) 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-offs

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 'impairment losses on financial instruments' 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 National Bank assesses whether a financial guarantee contract held is an integral element of a financial asset that is accounted for as a component of that instrument or is a contract that is accounted for separately. The factors that the National Bank considers when making this assessment include whether:

- ▶ the guarantee is implicitly part of the contractual terms of the debt instrument;
- ▶ the guarantee is required by laws and regulations that govern the contract of the debt instrument;
- the guarantee is entered into at the same time as and in contemplation of the debt instrument; and
- ▶ the guarantee is given by the parent of the borrower or another company within the borrower's group.

If the National Bank determines that the guarantee is an integral element of the financial asset, then any premium payable in connection with the initial recognition of the financial asset is treated as a transaction cost of acquiring it. The National Bank considers the effect of the protection when measuring the fair value of the debt instrument and when measuring ECL.

If the National Bank determines that the guarantee is not an integral element of the debt instrument, then it recognises an asset representing any prepayment of guarantee premium and a right to compensation for credit losses. A prepaid premium asset is recognised only if the guaranteed exposure neither is credit-impaired nor has undergone a significant increase in credit risk when the guarantee is acquired.

These assets are recognised as 'other assets'. The National Bank presents gains or losses on a compensation right in profit or loss in the line item 'reserves for credit losses'.

(h) Financial instruments, continued

(v) Designation at fair value through profit or loss

Financial assets

At initial recognition, the National Bank has designated certain financial assets as at FVTPL because this designation eliminates or significantly reduces an accounting mismatch, which would otherwise arise.

Financial liabilities

At initial recognition, the National Bank has designated certain financial liabilities as at FVTPL in either of the following circumstances:

- ▶ the liabilities are managed, evaluated and reported internally on a fair value basis; or
- the designation eliminates or significantly reduces an accounting mismatch that would otherwise arise.

(vi) Repurchase and reverse repurchase agreements

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.

(vii) 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.

Forward, futures, option and swap deals concluded for the purpose of the monetary policy execution are recognised at either nominal or amortised cost, or at cost depending on their content and economic nature.

(h) Financial instruments, continued

(vii) Derivatives, continued

Embedded derivatives

Derivatives may be embedded in another contractual arrangement (a host contract). The National Bank accounts for an embedded derivative separately from the host contract when:

- ▶ the host contract is not an asset in the scope of IFRS 9;
- ▶ the host contract is not itself carried at FVTPL;
- ▶ the terms of the embedded derivative would meet the definition of a derivative if they were contained in a separate contract; and
- ▶ the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract.

Separated embedded derivatives are measured at fair value, with all changes in fair value recognised in profit or loss unless they form part of a qualifying cash flow or net investment hedging relationship.

(viii) 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.

(i) 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.

(j) 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(h)(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(h)(i)) or designated as at FVTPL (see Note 3(h)(v)); these are measured at fair value with changes recognised immediately in profit or loss;
- swap transactions concluded with the second-tier banks and other financial institutions as part of implementation of the monetary policy and for promotion of the financial system stability, which are derivatives but are accounted for and presented at nominal cost (Note 2).

(k) 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(h)(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(h) (i) and (h)(v)); these are measured at fair value with changes recognised immediately in profit or loss;
- debt securities measured at FVOCI (see Note 3(h)(i)); and
- equity investment securities designated as at FVOCI (see Note 3(h)(i)).

(I) 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.

(m) 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. In accordance with the National Bank's accounting policy reserves of guarantee funds are formed at the expense of the accumulated contributions received from the participating banks.

(n) 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.

(o) 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.

(o) 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 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	7 to 50 years;
Furniture and equipment	5 to 10 years;
Computer equipment	3 to 8 years;
Vehicles	6 to 25 years.

(p) Intangible assets

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

Acquired computer software licenses are capitalised on the basis of the costs incurred to acquire and bring to use the specific software.

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.

(q) 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 goodwill is estimated at each reporting date. 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

(q) Impairment of assets, continued

Non-financial assets, continued

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. An impairment loss in respect of goodwill is not reversed.

(r) Credit related commitments

In the normal course of business, the National Bank enters into credit related commitments, comprising undrawn loan commitments, letters of credit and guarantees, and provides other forms of credit insurance.

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 at a below-market interest rate 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(h)(iv)) and the amount initially recognised less, when appropriate, the cumulative amount of income recognised in accordance with the principles of IFRS 15.

(s) 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.

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.

(s) Taxation, continued

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 taxable profit will be available against which the deductible temporary differences can be utilised.

(t) 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.

(u) 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.

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.

(u) Leases, continued

As a lessee, continued

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.

The National Bank used a number of practical expedients when applying IFRS 16 to leases previously classified as operating leases under IAS 17. In particular, the National Bank:

- ▶ applied the exemption not to recognise right-of-use assets and liabilities for leases with less than 12 months of lease term;
- excluded initial direct costs from the measurement of the right-of-use asset at the date of initial application.

(v) Standards issued but not yet effective

A number of new standards and amendments to standards are effective for annual periods beginning after 1 January 2021 and earlier application is permitted; however, the NBK has not early adopted the new or amended standards in preparing these consolidated financial statements.

Interest Rate Benchmark Reform - Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16)

The Phase 2 amendments provide practical relief from certain requirements in the standards. These reliefs relate to modifications of financial instruments, lease contracts or hedging relationships when a benchmark interest rate in a contract is replaced with a new alternative benchmark rate. When the basis for determining the contractual cash flows of a financial instrument is changed as a direct consequence of interest rate benchmark reform and is made on an economically equivalent basis, the Phase 2 amendments provide a practical expedient to update the effective interest rate of a financial instrument before applying the existing requirements in the standards. The amendments also provide an exception to use a revised discount rate that reflects the change in interest rate when remeasuring a lease liability because of a lease modification that is required by interest rate benchmark reform. Finally, the Phase 2 amendments provide a series of reliefs from certain hedge accounting requirements when a change required by interest rate benchmark reform occurs to a hedged item and/or hedging instrument and consequently the hedge relationship can be continued without any interruption.

Other standards

The following standards, amendments and interpretations are not expected to have a significant impact on the Company's financial statements:

- ► COVID-19-Related Rent Concessions (Amendment to IFRS 16).
- Property, Plant and Equipment: Proceeds before Intended Use (Amendments to IAS 16).
- Reference to Conceptual Framework (Amendments to IFRS 3).
- ▶ Classification of Liabilities as Current or Non-current (Amendments to IAS 1).
- ▶ Onerous contracts Cost of Fulfilling a Contract (Amendments to IAS 37).
- ▶ IFRS 17 Insurance Contracts.

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(h)(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.

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; with
- ▶ 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 two main 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

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/issuer is past due more than 90 days on any material credit obligation to the National Bank.

In assessing whether a borrower 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.

Incorporating 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.

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).

Credit risk - Amounts arising from ECL, continued

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(h)(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).

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%.

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 2020 and 31 December 2019. Unless specially indicated, for financial assets, the amounts in the table represent gross carrying amounts.

'000 KZT	31 December 2020				
	Stage 1	Stage 2	Stage 3	Total	
Placements and loans with banks and other financial institutions					
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	

'000 KZT		31 December 2	2020	
	Stage 1	Stage 2	Stage 3	Total
Investment securities at fair value through other comprehensive income				
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
Investment securities measured at amortised cost				
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

Credit quality analysis, continued

'000 KZT	31 December 2020				
	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	

'000 KZT		31 December 2020			
	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	

'000 KZT	Restated 31 December 2019				
_	Stage 1	Stage 2	Stage 3	POCI	Total
Placements and loans with banks and other financial institutions					
Rated AAA	227,398,669	_	_	_	227,398,669
Rated from AA- to AA+	1,019,227,774	3,348,948	_	_	1,022,576,722
Rated from A- to A+	294,499,014	_	_	_	294,499,014
Rated from BBB- to BBB+	8,465,978	2,964,400	_	_	11,430,378
Rated from BB- to BB+	29,629,443	10,669,586	_	_	40,299,029
Rated from B- to B+	154,126,526	_	26,125	_	154,152,651
Not rated*	33,901,493	_	458,219,478	278,262,465	770,383,436
Gross carrying amount	1,767,248,897	16,982,934	458,245,603	278,262,465	2,520,739,899
Loss allowance	(4,020,295)	(1,576)	(275,510,316)	(30,730,063)	(310,262,250)
Carrying amount	1,763,228,602	16,981,358	182,735,287	247,532,402	2,210,477,649

Credit quality analysis, continued

'000 KZT		31 December 2	019	
	Stage 1	Stage 2	Stage 3	Total
Investment securities at fair value through other comprehensive income				
Rated AAA	94,746,177	_	_	94,746,177
Rated from AA- to AA+	724,731,600	1,793,216	_	726,524,816
Rated from A- to A+	506,497,328	21,678,793	_	528,176,121
Rated from BBB- to BBB+	1,142,328,202	5,539,392	_	1,147,867,594
Rated from BB- to BB+	2,578,389	7,833,980	_	10,412,369
Carrying amount	2,470,881,696	36,845,381	_	2,507,727,077
Loss allowance	(1,223,156)	(76,893)	_	(1,300,049)
Carrying amount – fair value**	2,470,881,696	36,845,381	_	2,507,727,077
Investment securities measured at amortised cost				
Rated AAA	159,406,414	-	_	159,406,414
Rated A+	77,974,548	-	_	77,974,548
Rated from BBB- to BBB+	655,825,154	_	_	655,825,154
Rated from BB- to BB+	83,484,756	-	_	83,484,756
Not rated	10,042,455	_	_	10,042,455
Gross carrying amount	986,733,327	-	_	986,733,327
Loss allowance	(940,800)	-	-	(940,800)
Carrying amount	985,792,527	_	_	985,792,527

'000 KZT	31 December 2019			
	Stage 1	Stage 2	Stage 3	Total
Claims for repurchased loans				
Rated BB+	124,243,661	36,377	4,609	124,284,647
Rated B+	2,143,826	_	_	2,143,826
Rated B	104,825,536	56,862	5,048	104,887,446
Rated B-	19,604,323	3,310	11,998	19,619,631
Gross carrying amount	250,817,346	96,549	21,655	250,935,550
Loss allowance	(710,711)	(3,340)	(8,729)	(722,780)
Carrying amount	250,106,635	93,209	12,926	250,212,770

^{*} In 2020 Stage 1 (2019: Stage 3 and POCI) include FPL bonds with no externally assigned credit rating. FPL is a 100% subsidiary of the Ministry of Finance of the Republic of Kazakhstan. During 2020 some of these bonds, purchased in 2018 and 2019, were restructured (Note 10).

^{**} 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

	2020 KZT'000	2019 KZT'000
Interest income calculated using the effective interest method	R21 000	121 000
Interest income on financial assets measured at amortised cost:		
Placements and loans with banks and other financial institutions	150,518,982	131,937,893
Investment securities measured at amortised cost	79,844,576	53,929,177
Claims for repurchased loans	17,723,288	5,491,071
Reverse repurchase agreements	7,817,533	8,832,277
Interest income on financial assets measured at fair value through other comprehensive income		
Investment securities at fair value through other comprehensive income	111,279,285	97,790,467
Total interest income calculated using the effective interest method	367,183,664	297,980,885
Interest expense	• • • • • • • • • • • • • • • • • • •	
Interest expense on financial liabilities measured at amortised cost:		
Debt securities issued	(348,204,505)	(307,960,426)
Deposits and balances from banks and other financial institutions	(109,447,963)	(91,115,081)
Repurchase agreements	(4,854,777)	(13,387,106)
Deposit accounts of the Ministry of Finance of the Republic of Kazakhstan	(2,087,263)	(1,474,901)
Total interest expense on financial liabilities measured at amortised cost	(464,594,508)	(413,937,514)
	(97,410,844)	(115,956,629)

FEE AND COMMISSION INCOME

	2020 KZT'000	2019 KZT'000
Asset management fee	15,770,431	18,682,879
Pension asset management fee	6,954,406	6,001,189
Depository operations and servicing of financial markets and transfer operations	2,035,919	1,624,973
	24,760,756	26,309,041

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. During 2020 and 2019 the NBK received no interest for excess of the target yield.

Income on depositary 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 COMISSION EXPENSE

	2020 KZT'000	2019 KZT'000
Asset management services	3,669,310	2,759,598
Broker operations and account maintenance fees	2,542,040	4,161,633
Custodian services	62,735	259,666
Other	92,689	76,164
	6,366,774	7,257,061

8. NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	2020 KZT'000	2019 KZT'000
Placements and loans with banks and other financial institutions measured at FVTPL – change in fair value	(41,153,235)	62,352,874
Placements and loans with banks and other financial institutions measured at FVTPL – other interest income	40,067,267	38,386,236
Assets under external management	94,502,925	27,243,197
Other derivative financial instruments:	1,866,246	3,718,794
	95,283,203	131,701,101

Loss generated from change in fair value of subordinated bonds and deposits with banks (Note 19) is equal to KZT 17,784,382 thousand and KZT 23,368,853 thousand, respectively (2019: gain of KZT 51,371,347 thousand and KZT 10,981,527, respectively).

Other interest income comprise interest income on subordinated bonds and deposits with banks (Note 19) in the amount of KZT 36,645,865 thousand and KZT 3,421,402 thousand, respectively (2019: KZT 35,087,263 thousand and KZT 3,298,973 thousand, respectively).

9. NET GAIN ON INVESTMENT SECURITIES MEASURED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	2020 KZT'000	2019 KZT'000
Sale of debt investment securities	32,933,329	29,687,083
Dividends	7,826,628	3,542,634
	40,759,957	33,229,717

10. EXPENSES ON REHABILITATION OF THE BANKING SECTOR AND THE ECONOMY

During 2020 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 700,000,000 thousand and KZT 270,000,000 thousand, respectively, bearing interest rates of 6% and 4% per annum, respectively, with an obligation of their repayment in 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 9.49% to 12.13% per annum and 11.19% to 13.19% per annum, respectively. The difference of KZT 223,609,525 thousand and KZT 82,138,809 thousand, respectively, 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 and the economy.

Additionally, during 2020 in accordance with the Program on Improving the financial stability of the banking sector, coupon bonds of a quasi-public sector organisation and second-tier banks were purchased for the total amount of KZT 226,520,653 thousand (2019: KZT 914,086,276 thousand), bearing interest rates of 0.1% to 10.85% per annum (2019: 0.1% to 9% per annum), with an obligation of their repayment in 10-20 years (2019: 10-15 years). The National Bank has recognised such bonds at fair value at initial recognition (Note 19), determined using estimated market interest rates from 13.72% to 20.69% per annum (2019: from 12.03% to 30.81% per annum). The difference of KZT 93,666,939 thousand (2019: KZT 630,397,150 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 2020 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 for the total amount of KZT 32,024,836 thousand (2019: a quasi-public sector organisation and second-tier banks for KZT 86,141,019 thousand), bearing an interest rate of 10.75% per annum (2019: 10.75% to 10.95% per annum), with an obligation of their repayment in 1-10 years (2019: 6-7 years). The National Bank has recognised such bonds at fair value on initial recognition (Note 19), determined using estimated market interest rates from 10.35% to 15.83% per annum (2019: from 11.87% to 12.34% per annum). The difference of KZT 5,262,159 thousand (2019: KZT 5,218,637 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 2020 in accordance with other Government programs, KSF JSC purchased coupon bonds of quasi-public sector organisations for the total amount of KZT 9,479,994 thousand (2019: a second-tier bank for KZT 20,000,000 thousand), bearing interest rates from 0.10% to 5.00% per annum (2019: 0.15% per annum), with an obligation of their repayment in 1-30 years (2019: 20 years). The National Bank recognised such bonds at fair value at initial recognition (Note 19), determined using estimated market interest rates from 9.46% to 9.48% per annum (2019: 10.41% per annum). The difference of KZT 828,466 thousand (2019: KZT 17,122,626 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 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 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 and the economy.

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 2020 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

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.

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 of KZT 324,782,738 thousand 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 (EXPENSES)/INCOME, NET

	2020 KZT'000	2019 KZT'000
Deposits under the Program of mortgage loans refinancing	(71,218,797)	(35,607,085)
Contributions of banks participating in the guarantee system, net	39,172,057	35,690,169
Sale of collection coins and repurchase of measured bullions	1,857,431	1,884,315
Sale of printed products	1,428,796	3,446,928
Sale of medals, badges and jewelry	447,566	513,914
Rent of property and equipment	2,612	1,292
Other income/(expense), net	2,193,174	(3,424,133)
Expenses on reorganisation of Integrated Securities Registrar JSC and Central Securities Depository JSC	_	(682,614)
Expenses on disposal of property of Agency for Regulation and Development of the Financial Market of the Republic of Kazakhstan (AFR)	_	(1,250,692)
	(26,117,161)	572,094

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 2020 and 2019 KSF JSC placed deposits in certain banks with low interest rates. In 2020 the loss of KZT 67,989,718 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 11.59% to 15.16% per annum (2019: the loss of KZT 32,441,943 thousand using the interest rates from 10.57% to 19.16% per annum). The amount of KZT 71,218,797 thousand (2019: KZT 35,607,085 thousand) also includes reimbursement of expenses of KZT 3,229,079 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 (2019: KZT 3,165,142 thousand).

11. OTHER OPERATING (EXPENSES)/INCOME, NET, CONTINUED

Contributions of the banks participating in the guarantee system, net 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 39,172,057 thousand as well as expenses on compensation paid to depositors of forcibly liquidated banks in the amount of KZT nil (2019: KZT 36,082,476 thousand and KZT 392,307 thousand, respectively).

12. ALLOWANCE FOR EXPECTED CREDIT LOSSES

	2020 KZT'000	Restated 2019 KZT'000
Placements and loans with banks and other financial institutions (Note 19)	(164,417,961)	(242,409,063)
Investment securities measured at amortised cost	588,765	(814,810)
Investment securities at fair value through other comprehensive income	766,311	(417,820)
Other financial assets	(334,853)	(318,541)
Claims for repurchased loans	679,972	(228,353)
Inventories	(65,228)	(38,065)
Other non-financial assets	(11,973)	(537)
	(162,794,967)	(244,227,189)

13. BANKNOTES AND COINS PRODUCTION EXPENSES

	2020 KZT'000	2019 KZT'000
Banknotes production	21,438,694	1,347,694
Coins production	8,354,828	3,628,293
Other	764,946	335,467
	30,558,468	5,311,454

Banknotes and coins production expenses for 2020 include depreciation charge of equipment of KZT 1,417,263 thousand (2019: KZT 64,734 thousand).

14. PERSONNEL EXPENSES

	2020 KZT'000	2019 KZT'000
Payroll	12,775,050	15,457,172
Bonuses	8,966,328	10,895,915
Social tax	1,453,955	1,840,812
Insurance	434,950	769,156
Training	87,287	294,683
Other	63,223	97,278
	23,780,793	29,355,016

15. OTHER GENERAL AND ADMINISTRATIVE EXPENSES

	2020 KZT'000	2019 KZT'000
Information and other services	39,436,119	7,654,564
Communication	2,213,393	1,724,627
Repair and maintenance of property and equipment	1,346,875	1,969,083
Taxes other than income tax	1,287,232	1,288,395
Gratuitous assignment of property	935,755	516,758
Property and equipment and inventories	529,356	597,231
Short-term rent expenses	546,642	233,351
Business trip expenses	378,346	742,885
Security	360,239	361,244
Depreciation and amortisation	339,049	265,112
Utilities	304,171	259,493
Transportation	230,962	369,453
Representation expenses	185,669	349,865
Insurance of property and equipment	62,063	65,366
Advertising, announcements and presentations in mass media	51,685	93,937
Other	706,111	719,551
	48,913,667	17,210,915

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.

	2020 KZT'000	Restated 2019 KZT'000
Current income tax (expense)/benefit	(1,625,922)	1,080,324
Movement in deferred tax assets due to origination and reversal of temporary differences	91,342,022	119,845,442
Total income tax benefit	89,716,100	120,925,766

In 2020 the applicable tax rate for current and deferred tax is 20% (2019: 20%).

Reconciliation of effective tax rate for the year ended 31 December:

	2020 KZT'000	%	Restated 2019 KZT'000	%
Loss before income tax	(1,209,899,114)		(898,712,732)	
Income tax at the applicable tax rate	241,979,823	(20.00)	179,742,546	(20.00)
Effect of non-taxable operations of the NBK	(59,000,123)	4.88	(44,834,161)	4.99
Non-taxable income on securities	7,971,652	(0.66)	3,447,369	(0.38)
Non-taxable income on activities of KDIF JSC	5,481,709	(0.45)	11,185,262	(1.24)
Non-deductible expenses on activities of KSF JSC	(15,967,361)	1.32	(30,198,357)	3.36
Write-off of previously recognised DTA on FPL bonds	(91,158,636)	7.53		
Other non-taxable income	409,036	(0.03)	1,583,107	(0.19)
	89,716,100	(7.42)	120,925,766	(13.46)

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 2020 and 2019. 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.

Movements in temporary differences during the years 2020 and 2019 are presented as follows:

'000 KZT	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)

'000 KZT	Balance at 1 January 2019	Recognised in profit or loss	Recognised directly in equity	Disposal of subsidiary	Restated Balance at 31 December 2019
Placements and loans with banks and other financial institutions	114,138,993	119,972,303	-	-	234,111,296
Property, plant and equipment and intangible assets	(2,524,733)	(170,339)	6,785	35,820	(2,652,467)
Debt securities issued	-	929,770	_	_	929,770
Other assets	7,770	17,458	_	(2,574)	22,654
Other liabilities	338,061	27,490	_	(8,886)	356,665
Tax loss carry-forwards	25,401	(1,470)	_	-	23,931
	111,985,492	120,775,212	6,785	24,360	232,791,849
Unrecognised deferred tax liabilities	(946)	(929,770)	_	_	(930,716)
Recognised deferred tax assets	111,984,546	119,845,442	6,785	24,360	231,861,133
Deferred tax assets	114,394,028	119,948,373	2,210	_	234,344,611
Deferred tax liabilities	(2,409,482)	(102,931)	4,575	24,360	(2,483,478)

16. INCOME TAX BENEFIT, CONTINUED

Deferred tax assets and liabilities, continued

As at 31 December 2020 deferred tax assets of KZT 325,340,691 thousand (31 December 2019: KZT 234,111,296 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.

17. CASH AND CASH EQUIVALENTS

	2020 '000 KZT	2019 '000 KZT
Nostro accounts in foreign banks	2,238,402,909	938,139,617
Cash on hand in foreign currency	122,879,854	113,367,726
Reverse repurchase agreements with initial maturity of less than three months	20,012,508	145,868,206
Tenge denominated deposits with Kazakhstan banks with the original maturity of less than three months	1,550,029	_
Nostro accounts in Kazakhstan banks	759,473	987,005
Deposits in foreign banks with the original maturity of less than three months	15,391	-
Accounts with the Bank for International Settlements	6,668	235
Total cash and cash equivalents in the consolidated statement of cash flows	2,383,626,832	1,198,362,789

As at 31 December 2020 nostro accounts in foreign banks included restricted for use uninvested cash under management of NIC NBK JSC in the amount of KZT 16,295,863 thousand (31 December 2019: KZT 14,059,297 thousand) that was not included in cash equivalents.

18. GOLD

	2020 '000 KZT	2019 '000 KZT
Gold bullion in NBK depository	8,316,001,083	5,333,263,926
Gold deposits with foreign banks:	-	
- Rated AAA	50,779,800	173,576,718
- Rated AA-	45,902,111	565,544,209
- Rated from A- to A+	684,330,921	632,371,696
Total gold on deposits with foreign banks	781,012,832	1,371,492,623
Gold bullion in a foreign bank depository:		
- Rated AAA	717,707,368	525,384,413
- Rated A+	131,548,388	-
Total gold bullion in a foreign bank depository	849,255,756	525,384,413
	9,946,269,671	7,230,140,962

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.

	2020 '000 KZT	Restated 2019 '000 KZT
Placements and loans with banks and other financial institutions measured at amortised cost	4,338,690,000	2,210,477,649
Placements and loans with banks and other financial institutions measured at FVTPL	292,215,561	370,283,443
	4,630,905,561	2,580,761,092

	2020	Restated 2019
MEASURED AT AMORTISED COST	'000 KZT	'000 KZT
MEASURED AT AMORTISED COST		
Placements with foreign banks and other financial institutions		
Nostro accounts in banks		
- Rated AAA	876,804,943	227,398,434
- Rated from AA- to AA+	1,241,290,929	363,209,052
- Rated from A- to A+	68,052,184	291,661,462
- Rated from BBB- to BBB+	4,488,595	6,494,800
- Rated from BB- to BB+	2,047,425	15,536,356
- Rated B	87,115	55,235
- Not rated	_	1,353,540
Gross nostro accounts in banks	2,192,771,191	905,708,879
Allowance for expected credit losses	(1,589)	(8,155)
Net nostro accounts in banks	2,192,769,602	905,700,724
Other accounts and deposits		
Non-invested cash under external management (Note 22)		
- Rated AA-	_	46,504,566
- Rated A+	61,937,952	-
Gross other accounts and deposits	61,937,952	46,504,566
Net other accounts and deposits	61,937,952	46,504,566

	2020 '000 KZT	Restated 2019 '000 KZT
Accounts with International Monetary Fund	702,245,248	612,863,104
Receivables on foreign currencies transactions	14,786,910	20,379,428
Accounts with the Bank for International Settlements	6,668	235
Total other accounts and deposits	778,976,778	679,747,333
Total accounts and deposits in foreign banks and other financial institutions	2,971,746,380	1,585,448,057
Nostro accounts of subsidiaries with second tier banks		
- Rated BBB-	_	238
- Rated from BB- to BB+	561,037	650,600
- Rated B	188,065	317,809
- Not rated	_	3,826
Gross nostro accounts of subsidiaries with second tier banks	749,102	972,473
Allowance for expected credit losses	(168)	(661)
Net nostro accounts of subsidiaries with second tier banks	748,934	971,812
Placements, loans and receivables of Kazakhstan banks and other financial institutions	k	
Deposits in banks *	•	
- Rated BBB	52,601,287	494,768
- Rated from BB- to BB+	185,808,411	13,995,627
- Rated from B- to B+	133,798,301	5,936,313
- Not rated	869,309	998,573
Gross deposits in banks	373,077,308	21,425,281
Allowance for expected credit losses	(3,183,249)	(176,216)
Net deposits in banks	369,894,059	21,249,065

^{*} as at 31 December 2019 include the asset part of the swap deals in the amount of KZT 10,669,586 thousand that is accounted for not as derivatives, but as deposits in banks and is measured at nominal in accordance with the Basis of Preparation (Note 2).

	2020 '000 KZT	Restated 2019 '000 KZT
Loans issued *		
- Rated BBB-	693,488,838	-
- Rated from BB- to BB+	63,723,747	10,116,446
- Rated from B- to B	111,330,432	147,843,294
- Rated CCC-	14,088,019	-
- Not rated	155,460,540	750,485,621
Gross loans issued (Note 10)	1,038,091,576	908,445,361
Allowance for expected credit losses	(44,400,407)	(310,077,218)
Net loans issued	993,691,169	598,368,143
Receivables from other financial institutions		
Receivables from "UAPF" JSC	545,354	489,772
Receivables from Ministry of Finance of the Republic of Kazakhstan	2,064,104	3,950,800
Total receivables from other financial institutions	2,609,458	4,440,572
Total placements with banks and receivables from Kazakhstan banks and other financial institutions	1,366,194,686	624,057,780
Gross placements and loans with banks and other financial institutions measured at amortised cost	4,386,275,413	2,520,739,899
Total allowance for expected credit losses	(47,585,413)	(310,262,250)
Net placements and loans with banks and other financial institutions measured at amortised cost	4,338,690,000	2,210,477,649

^{*} Loans issued measured at amortised cost include FPL bonds and coupon bonds of second-tier banks and quasi-public sector organisations (Note 10).

In 2020 the subsidiary of the NBK, KSF JSC, acquired FPL bonds for the amount of KZT 174,000,000 thousand, bearing the interest rate of 9% per annum, with repayment date in 2030 (2019: KZT 614,086,276 thousand, bearing the interest rate of 9% per annum, with repayment dates in 2029–2034). Upon initial recognition KSF JSC recognised these bonds at fair value, the difference between the nominal value and fair value in the amount of KZT 51,916,657 thousand (2019: KZT 387,284,855 thousand) was recognised in profit or loss as expenses on rehabilitation of the banking sector and the economy (Note 10).

In December 2020 FPL bonds, purchased by KSF 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).

	2020 '000 KZT	Restated 2019 '000 KZT
MEASURED AT FVTPL		
Deposits in banks		
- Rated BB	15,788,599	27,417,869
- Rated from B- to B+	20,553,952	31,009,512
Total deposits in banks	36,342,551	58,427,381
Loans issued*		
- Rated BBB-	335,074	273,310
- Rated from B- to B	255,537,936	311,582,752
Total loans issued (Note 10)	255,873,010	311,856,062
Total placements and loans with banks and other financial institutions measured at fair value	292,215,561	370,283,443

^{*} 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 of assets withdrawal.

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 2020 and 2019 is as follows:

'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 derecognized	(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

Analysis of allowance for expected credit losses, continued

'000 KZT	Restated 2019				
_	Stage 1	Stage 2	Stage 3	POCI	Total
Placements and loans with banks and other financial institutions					
Balance at 1 January	9,061,204	6,588,161	52,180,053	_	67,829,418
- Transfer to Stage 1	442,110	(177,856)	(264,254)	_	_
- Transfer to Stage 2	(615,596)	_	615,596	_	_
- Transfer to Stage 3	(26,926)	_	26,926	-	_
Net remeasurement of loss allowance	2,939,471	178,884	223,427,318	_	226,545,673
New financial assets originated or purchased*	216,476	1,598	_	30,730,063	30,948,137
Derecognised financial assets	(7,979,814)	(6,589,228)	(515,705)	-	(15,084,747)
Write-offs	(16,071)	-	_	-	(16,071)
Foreign exchange and other movements	(559)	17	40,382	_	39,840
Balance at 31 December	4,020,295	1,576	275,510,316	30,730,063	310,262,250

includes new financial assets created during the year, including transfers of these assets between stages.

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.

During 2020 the loss allowance for bonds of DSFK Special Finance Company LLP was written off and recovered in the total amount of KZT 10,064,087 thousand.

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 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.

In 2019 purchase of FPL bonds in the amount of KZT 614,086,276 thousand has led to the increase in the gross carrying amount, and the corresponding increase in the loss allowance of KZT 30,730,063 thousand, categorised as POCI.

The FPL bonds acquired in 2018 were impaired and categorised to Stage 3 financial instruments during the year ended 31 December 2019. Such classification resulted in the recognition of expenses on allowances for credit losses of KZT 245,756,021 thousand.

Partial repayment of previously issued loans with a gross carrying amount of KZT 22,425,758 thousand resulted in decreased loss allowance by the same amount included in Stage 3.

In 2019 maturity of deposits in banks in the amount of KZT 732,237,106 thousand and repayments of previously issued loans in the amount of KZT 267,420,518 thousand have led to decreased loss allowance of KZT 15,084,747 thousand

As at 31 December 2020 and 31 December 2019 the National Bank has no placements with a counterparty-banks in the amount exceeding 10% of equity.

As at 31 December 2020 the "nostro" accounts opened in local banks in the amount of KZT 748,934 thousand (31 December 2019: KZT 971,812 thousand), belong to subsidiary companies of the NBK.

As at 31 December 2020 loans amounting to KZT 43,796,297 thousand were past due for more than 90 days (31 December 2019: KZT 29,708,279 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 2020 and 31 December 2019:

	2020 '000 KZT	2019 '000 KZT
Assets		
Assets under external management	•	
Hedge funds, private equity and real estate funds	632,525,226	366,391,015
Futures	262,297	534,827
Forwards	238,403	158,038
Assets under own management		
Cross currency and interest rate swap	-	592,356
Forwards	_	107,232
Futures	-	49,722
Total financial instruments under management at fair value through profit or loss	633,025,926	367,833,190
Liabilities		
Liabilities under external management		
Forwards	(467,296)	(228,195)
Futures	(499,811)	(527,629)
Liabilities under own management		
Cross currency and interest rate swap	_	(178,391)
Swap	(1,058)	_
Total financial instruments under management at fair value through profit or loss	(968,165)	(934,215)

Investments in alternative instruments comprised investments in hedge-funds private equity funds and real estate 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 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 2020 and 2019 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.

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 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 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 2020 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 on 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 investments 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 on the 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.

The tables below summarises, by major currencies, the contractual amounts of the National Bank's outstanding balances from derivative transactions, excluding portfolios under external management, as at 31 December 2020 and 31 December 2019 with details of the contracted weighted average exchange rates and remaining periods to maturity.

	Contract/ notional amount '000 KZT		Weighted-average contra prices/exchange	
	2020	2019	2020	2019
Swap				
For the period less than 3 months			•	
Buy USD to KZT	1,154,826	_	421.30	-
Forwards for the period less than 3 months				
Buy EUR to USD	_	114,810,767	_	1.12
Futures for the period less than 3 months				
Sell EUR	_	(11,915,587)	_	134.18
Buy JPY	_	2,677,488	_	152.13
Total		(9,238,099)		
Total	1,154,826	105,572,668		

21. REVERSE REPURCHASE AGREEMENTS

International financial institutions and Kazakhstan banks:	2020 '000 KZT	2019 '000 KZT
- Rated AAA	-	72,847,700
- Not rated	20,012,508	73,020,506
	20,012,508	145,868,206

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 2020 the fair value of the financial assets accepted as collateral under reverse repurchase agreements is KZT 19,121,142 thousand (31 December 2019: KZT 146,683,539 thousand).

During 2020 not rated reverse repo transactions of KZT 20,012,508 thousand were entered in the auto repo market of KASE JSC (31 December 2019: KZT 73,020,506 thousand).

22. INVESTMENT SECURITIES MEASURED AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	2020 '000 KZT	2019 '000 KZT
Debt instruments		
Investments in foreign securities		
Government bonds		
US Government Treasury bonds	479,145,378	290,902,816
Qatari Government bonds	86,512,041	64,339,809
Indonesian Government bonds	82,736,717	64,430,327
British Government Treasury bonds	79,846,362	51,363,271
UAE Government bonds	77,813,610	77,910,685
Columbian Government bonds	74,078,171	66,419,435
Philippine Government bonds	66,915,236	33,942,731
Mexican Government bonds	57,717,845	45,862,737
French Government bonds	54,014,331	54,286,885
Peru Government bonds	38,528,935	15,685,269
Australian Government Treasury bonds	37,481,617	42,312,229
Canadian Government Treasury bonds	32,860,161	25,268,046
Polish Government Treasury bonds	27,784,582	32,872,937
Korean Government Treasury bonds	27,521,807	36,478,150
Lithuanian Government bonds	26,134,949	31,150,544
Japanese Government Treasury bonds	25,824,029	8,597,861
Chilean Government bonds	22,464,026	18,704,564
Panama Government bonds	16,813,276	15,219,749
Chinese Government bonds	15,598,428	7,657,929
Hongkong Government bonds	10,568,144	-
Cayman Government bonds	8,743,560	11,167,457
Paraguay Government bonds	8,667,468	_
Russian Federation Government bonds	6,436,739	-
Malaysian Government bonds	6,102,685	18,552,692
Spanish Government Bonds	5,355,315	_

	2020 '000 KZT	2019 '000 KZT
Morocco Government bonds	3,397,695	-
Irish Government bonds	3,014,924	2,422,535
Singapore Government bonds	1,849,349	5,860,644
German Government bonds	1,456,692	1,459,254
Estonian Government bonds	1,428,014	-
Romanian Government bonds	1,014,001	-
Israeli Government bonds	331,325	-
Luxembourg Government bonds	_	7,857,620
Uruguay Government bonds	_	4,208,765
Italian Government bonds	_	3,102,634
Saudi Arabia Government bonds	_	2,077,018
Oman Government bonds	_	1,346,845
Total government bonds	1,388,157,412	1,041,461,438
Debt securities of international governmental and nongovernmental financial institutions		
- Rated AAA	52,952,728	24,176,576
- Rated AA+	_	7,552,561
- Rated AA	64,704,662	26,879,393
- Rated AA-	4,238,946	26,089,505
- Rated A+	30,450,628	20,355,522
- Rated A	13,840,763	12,029,216
- Rated A-	1,615,227	1,537,324
- Rated BBB+	2,630,392	1,999,027
- Rated BBB	453,607	-
- Rated BBB-	2,961,843	2,684,221
Total investments in debt securities of international governmental and nongovernmental financial institutions	173,848,796	123,303,345

	2020 '000 KZT	2019 '000 KZT
Corporate bonds of international companies		
- Rated from A- to AAA	336,709,949	385,831,119
- Rated from BBB+ to BBB-	372,597,532	361,592,512
- Rated BB+	8,619,023	2,064,128
Total investments in corporate bonds of international companies	717,926,504	749,487,759
Total investments in foreign securities	2,279,932,712	1,914,252,542
Investments in Kazakhstan securities	'	
Treasury bills of Ministry of Finance of the Republic of Kazakhstan	453,101,583	559,188,706
Debt securities of Kazakhstan financial organisations	559,910	7,001,396
Pledged under sale and repurchase agreements	•	
Treasury bills of Ministry of Finance of the Republic of Kazakhstan	94,346,826	27,284,433
Total investments in Kazakhstan securities	548,008,319	593,474,535
Total debt investments	2,827,941,031	2,507,727,077
Equity instruments		
Shares of NC "KazMunayGas" JSC	750,000,000	750,000,000
Corporate shares	5,496,026	19,526,150
Total equity investments	755,496,026	769,526,150
Gross investment securities measured at fair value through other comprehensive income	3,583,437,057	3,277,253,227
Allowance for expected credit losses	(630,607)	(1,300,049)
Total investment securities measured at fair value through other comprehensive income*	3,583,437,057	3,277,253,227

^{*} 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 2020 the bonds of the Ministry of Finance of the Republic of Kazakhstan with market value of KZT 94,346,826 (31 December 2019: KZT 27,284,433 thousand) were subject to a registered debenture to secure the repurchase agreements.

As at 31 December 2020 a portion of investment securities measured at fair value through other comprehensive income was under the management of six (31 December 2019: seven) foreign asset management organisations. Depending on 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	2020 '000 KZT	2019 '000 KZT	Strategy	Index
National Investment Corporation of the NBK JSC	200,547,370	165,045,102	Alternative instruments	65% – MSCI ACWI Investable Market Net Total Return Index (M1WDIM), 35% – Barclays Global Aggregate Bond Index (LEGATRUH)
Amundi Corporate Bonds	116,817,894	99,055,168	Global corporate bonds of investment grade	ICE BofAML Q847 Custom Index
Nomura Asset Management U.K. Limited	357,970,439	405,035,601	Global corporate bonds of investment grade	ICE BofAML Q847 Custom Index
Wellington	113,090,636	96,980,685	Global corporate bonds of investment grade	ICE BofAML Q847 Custom Index
Aviva Investors Global Services Limited	389,944,946	333,297,949	Bonds of emerging markets in hard currency	ICE BofAML Q846 Custom Index
Deutsche Asset Management International GmbH	327,496,153	277,738,209	Bonds of emerging markets in hard currency	ICE BofAML Q846 Custom Index
SSB	-	25,055	Mandate is closed	N/a
Total assets under external management	1,505,867,438	1,377,177,769		

As at 31 December 2020 uninvested balances equivalent to KZT 61,937,952 thousand (31 December 2019: KZT 46,504,566 thousand), related to portfolios under external management are presented within "Placements and loans with banks and other financial institutions" (Note 19).

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	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	

'000 KZT	2019				
	Stage 1	Stage 2	Stage 3	Total	
Investment securities measured at fair value through other comprehensive i	ncome				
Balance at 1 January	600,234	283,663	_	883,897	
- Transfer to Stage 1	60,453	(60,453)	_	_	
- Transfer to Stage 2	(45,306)	45,306	_	_	
Net remeasurement of loss allowance	542,311	7,849	_	550,160	
New financial assets originated or purchased	569,952	403,439	_	973,391	
Financial assets that have been derecognised	(500,366)	(605,365)	_	(1,105,731)	
Foreign exchange and other movements	(4,122)	2,454	_	(1,668)	
Balance at 31 December	1,223,156	76,893	-	1,300,049	

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 2020 (2019: 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

	2020 '000 KZT	2019 '000 KZT
Investments in foreign securities		
Eurobonds rated AAA	154,570,395	145,020,698
Government bonds rated A+	95,086,919	77,974,548
Corporate bonds rated AAA	14,040,998	14,385,716
	263,698,312	237,380,962
Allowance for expected credit losses	(120,217)	(124,495)
Carrying amount of investments in foreign securities	263,578,095	237,256,467
Investments in Kazakhstan securities	•	
Bonds of the Ministry of Finance of the Republic of Kazakhstan rated BBB-	719,355,438	617,668,595
Securities of second-tier banks and other organisations	139,242,045	121,641,315
Municipal bonds of Akimat of Shymkent city	-	10,042,455
	858,597,483	749,352,365
Allowance for expected credit losses	(231,843)	(816,305)
Carrying amount of investments in Kazakhstan securities	858,365,640	748,536,060
Gross investment securities	1,122,295,795	986,733,327
Allowance for expected credit losses	(352,060)	(940,800)
Total investment securities	1,121,943,735	985,792,527

Analysis of allowance for expected credit losses

Movement in allowance for expected credit losses for investment securities measured at amortised cost for 2020 and 2019 is as follows:

'000 KZT	2020	2019
	Stage 1	Stage 1
Investment securities measured at amortised cost		
Balance at 1 January	940,800	126,520
Net remeasurement of loss allowance	(629,926)	2,043
New financial assets originated or purchased	41,222	818,401
Financial assets that have been derecognised	(61)	(5,634)
Foreign exchange and other movements	25	_
Write-offs	_	(530)
Balance at 31 December	352,060	940,800

As at 31 December 2020 and 31 December 2019 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 2020	34,528,609	34,126,852	5,287,887	2,536,275	1	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)	ı	(908'89)	(70,249)	(569,811)
Write-offs	(5,941)	(678,901)	(42,431)	(2,649)	1	(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	I	1	3,137,580	21,267,837
Depreciation and amortisation for the year	656,249	2,791,888	905,452	229,707	805,439	1	1,156,301	6,545,036
Disposals	(42,541)	(184,632)	(187,959)	(27,660)	1	-	(70,249)	(513,041)
Write-offs	(5,940)	(678,851)	(42,924)	(1,432)	ı	1	(182,974)	(912,121)
Balance at 31 December 2020	1,190,489	16,324,406	3,369,269	657,450	805,439	1	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

24. PROPERTY, EQUIPMENT AND INTANGIBLE ASSETS, CONTINUED

Historical/revalued cost Historical/revalued cost Additions Additions 1,406,889 1,992,296 2,163,597 1,176,317 2,979,317 3,462,350 7,619,411 Additions 1,406,889 1,992,296 34,126,487 (120,732) (120,532) (1,255,927) (1,069,185) Write-offs Balance at 31 December 2019 34,528,609 34,126,882 2,989,884 34,528,609 34,126,882 34,126,982 34,126,882 34,126,982 34,126,982 34,126,982 34,126,982 34,126,982 34,126,982 34,126,982 34,126,982 34,126,982 34,126,982 34,126,982 34,126,982 34,126,982 34,126,982 34,126,982 34,126,982 34,126,982 34,136,980 34,126,882 34,126,982 34,136,982 34,136,982 34,136,982 34,136,982 34,136,982 34,136,882 34,136	'000 KZT	Land, buildings and structures	Furniture and equipment	Computer equipment	Vehicles	Construction in progress/ equipment not yet installed	Intangible assets	Total
36,636,461 33,246,520 3,893,817 2,979,317 3,462,350 1,406,889 1,992,296 2,163,597 198,868 775,235 (1,259,197) (875,649) (689,349) (120,732) (1,255,927) (761) 2019 34,528,609 34,126,852 5,287,887 2,536,275 2,980,897 (761) 10n and impairment 1,542,544 12,549,261 2,499,507 609,440 - - 10n for the year 1,406,850 2,959,823 868,309 455,035 - - 109 (5,271,292) (235,736) (83,532) (521,178) - - - 109 5,82,721 14,396,001 2,694,700 456,835 -	Historical/revalued cost							
dimpairment 1,542,544 1,992,296 2,163,597 198,868 775,235 dimpairment 1,542,544 (236,315) (680,178) (521,178) (761) dimpairment 1,542,544 12,549,261 2,499,507 609,440 - the year 1,406,850 2,959,823 868,309 455,035 - the year 1,406,850 (235,736) (88,532) (521,178) - the year 1,406,850 2,959,823 868,309 455,035 - the year 1,406,850 (235,736) (88,532) (521,178) - seg,721 14,396,001 2,694,700 456,835 - seg,721 14,396,001 2,694,700 456,835 - seg,788 19,730,851 2,593,187 2,079,440 2,980,897	Balance at 1 January 2019	36,636,461	33,246,520	3,893,817	2,979,317	3,462,350	7,619,411	87,837,876
(1,255,927)	Additions	1,406,889	1,992,296	2,163,597	198,868	775,235	1,314,262	7,851,147
d impairment 4,528,609 34,126,852 5,287,887 5,536,275 2,980,897 d impairment 1,542,544 12,549,261 2,499,507 609,440 - the year 1,406,850 2,959,823 868,309 455,035 - (95,381) (877,347) (589,584) (86,462) - (2,271,292) (235,736) (83,532) (521,178) - 582,721 14,396,001 2,694,700 456,835 - 33,945,888 19,730,851 2,593,187 2,079,440 2,980,897	Disposals	(1,259,197)	(875,649)	(689,349)	(120,732)	(1,255,927)	(1,069,185)	(5,270,039)
d impairment 1,542,544 12,549,261 2,499,507 609,440 - the year 1,406,850 2,959,823 868,309 455,035 - (95,381) (877,347) (589,584) (86,462) - (2,271,292) (235,736) (83,532) (521,178) - 582,721 14,396,001 2,694,700 456,835 - 33,945,888 19,730,851 2,593,187 2,079,440 2,980,897	Write-offs	(2,255,544)	(236,315)	(80,178)	(521,178)	(761)	(378,328)	(3,472,304)
d impairment 1,542,544 12,549,261 2,499,507 609,440 - the year 1,406,850 2,959,823 868,309 455,035 - (95,381) (877,347) (589,584) (86,462) - (2,271,292) (235,736) (83,532) (521,178) - 582,721 14,396,001 2,694,700 456,835 - 33,945,888 19,730,851 2,593,187 2,079,440 2,980,897	Balance as at 31 December 2019	34,528,609	34,126,852	5,287,887	2,536,275	2,980,897	7,486,160	86,946,680
the year 1,406,850 2,959,823 868,309 455,035 - (95,381) (87,347) (589,584) (86,462) - (2,271,292) (235,736) (83,532) (521,178) - 582,721 14,396,001 2,694,700 456,835 - 33,945,888 19,730,851 2,593,187 2,079,440 2,980,897	Depreciation and amortisation and impairmer losses Balance at 1 January 2019		12,549,261	2,499,507	609,440	1	2,871,930	20,072,682
(95,381) (877,347) (589,584) (86,462) - (2,271,292) (235,736) (83,532) (521,178) - 582,721 14,396,001 2,694,700 456,835 - 33,945,888 19,730,851 2,593,187 2,079,440 2,980,897	Depreciation and amortisation for the year	1,406,850	2,959,823	868,309	455,035	-	1,576,958	7,266,975
(2271,292) (235,736) (83,532) (521,178) - 582,721 14,396,001 2,694,700 456,835 - 33,945,888 19,730,851 2,593,187 2,079,440 2,980,897	Disposals	(95,381)	(877,347)	(589,584)	(86,462)	ı	(934,313)	(2,583,087)
582,721 14,396,001 2,694,700 456,835 – 33,945,888 19,730,851 2,593,187 2,079,440 2,980,897	Write-offs	(2,271,292)	(235,736)	(83,532)	(521,178)	ı	(376,995)	(3,488,733)
33,945,888 19,730,851 2,593,187 2,079,440 2,980,897	Balance at 31 December 2019	582,721	14,396,001	2,694,700	456,835	1	3,137,580	21,267,837
33,945,888 19,730,851 2,593,187 2,079,440 2,980,897	Carrying amount							
	Balance as at 31 December 2019	33,945,888	19,730,851	2,593,187	2,079,440	2,980,897	4,348,580	65,678,843

There are no capitalised borrowing costs related to the acquisition or construction of property and equipment during 2020 and 2019.

339,049 thousand (2019: KZT 265,112 thousand) - in other general and administrative expenses, KZT 1,417,263 thousand (2019: KZT 64,734 thousand) - in banknotes and coins production expenses, KZT 641,534 thousand (2019: KZT 526,233 thousand) – in fee and commission income, KZT 16,493 thousand (2019: KZT 2,661,954 Depreciation expenses in the amount of KZT 4,130,697 thousand (2019: KZT 3,748,942 thousand) were included in depreciation and amortisation expenses, KZT thousand) - in other operating income.

24. PROPERTY, EQUIPMENT AND INTANGIBLE ASSETS, CONTINUED

Revalued assets

As at 31 December 2020 and 31 December 2019 buildings, constructions and vehicles owned by the National Bank were not revalued.

As at 31 December 2017 vehicles owned by the National Bank were not revalued, while revaluation of buildings and constructions was performed.

The fair values of the National Bank's land, buildings, and vehicles are categorised into Level 3 of the fair value hierarchy.

Should the land plots, buildings, constructions and vehicles not be revalued, then their carrying amounts as at 31 December 2020 would have been KZT 12,588,036 thousand (31 December 2019: KZT 12,161,613 thousand).

25. OTHER ASSETS

	2020 '000 KZT	2019 '000 KZT
	000 KZ1	000 K21
Claims on repurchased loans	539,851,994	250,935,550
Short-term receivables	407,531,193	-
Other receivables	26,467,506	16,691,051
Gross other financial assets	973,850,693	267,626,601
Allowance for expected credit losses on claims on repurchased loans	(86,294)	(722,780)
Allowance for expected credit losses on other financial assets	(546,715)	(217,685)
Allowance for expected credit losses	(633,009)	(940,465)
Net other financial assets	973,217,684	266,686,136
Inventories	17,952,756	27,796,507
Refined and non-refined precious metals and stones	3,254,765	3,142,971
Prepayments for property, plant and equipment	1,670,486	2,647,688
Prepayment for banknotes and coins production	823,635	23,521,159
Other	2,382,456	3,264,203
Total other non-financial assets	26,084,098	60,372,528
Total other assets	999,301,782	327,058,664

Claims on repurchased mortgage loans include amounts receivable from commercial bank-partners for purchased rights of claim on KZT-denominated mortgage loans.

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".

During 2020 KSF JSC purchased mortgage loan portfolios from eight second-tier banks (in 2019: MO "Baspana", from eight second-tier banks).

As at 31 December 2020 the volume of claims on repurchased loans was KZT 539,851,994 thousand (2019: KZT 250,935,550 thousand). As at 31 December 2020 the allowance for expected credit losses on claims on repurchased loans amounted to KZT 86,294 thousand (31 December 2019: KZT 722,780 thousand).

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.

25. OTHER ASSETS, CONTINUED

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 on claims on repurchased loans for 2020 and 2019 is as follows:

'000 KZT	2020				
	Stage 1	Stage 2	Stage 3	Total	
Claims on 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	

'000 KZT		2019		
_	Stage 1	Stage 2	Stage 3	Total
Claims on repurchased loans				
Balance at 1 January	493,261	_	1,166	494,427
Transfer to Stage 2	(1,615)	1,615	_	_
Transfer to Stage 3	(590)	_	590	_
Net remeasurement of loss allowance	2,122	1,725	7,549	11,396
New financial assets originated or purchased	238,320	_	_	238,320
Financial assets that have been derecognised	(20,787)	_	(576)	(21,363)
Balance at 31 December	710,711	3,340	8,729	722,780

25. OTHER ASSETS, CONTINUED

Analysis of allowance for expected credit losses, continued

Movement in the impairment allowance for expected credit losses on other financial assets for 2020 and 2019 is as follows:

'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

'000 KZT	2019			
-	Stage 1	Stage 2	Stage 3	Total
Other financial assets				
Balance at 1 January	286,369	-	_	286,369
New financial assets originated or purchased	313,544	_	4,997	318,541
Write-offs	(387,225)	_	_	(387,225)
Balance at 31 December	212,688	-	4,997	217,685

Credit quality analysis

The following table sets out information about the credit quality of other financial assets measured at amortised cost for 2020 and 2019:

'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)	
Net carrying amount	973,151,655	24,099	41,930	973,217,684	

'000 KZT	2019			
	Stage 1	Stage 2	Stage 3	Total
Other financial assets				
Not overdue	267,497,348	-	_	267,497,348
Overdue 31-90 days	_	97,298	-	97,298
Overdue 91-180 days	_	_	4,612	4,612
Overdue 181-360 days	_	_	27,343	27,343
Gross carrying amount	267,497,348	97,298	31,955	267,626,601
Loss allowance	(923,399)	(3,340)	(13,726)	(940,465)
Net carrying amount	266,573,949	93,958	18,229	266,686,136

26. CURRENCY IN CIRCULATION

	2020 '000 KZT	2019 '000 KZT
Banknotes and coins in circulation	3,252,242,640	2,690,130,336
Less banknotes and coins on hand	(1,374,161)	(1,382,550)
	3,250,868,479	2,688,747,786

27. DEPOSITS AND BALANCES FROM BANKS AND OTHER FINANCIAL INSTITUTIONS

	2020 '000 KZT	2019 '000 KZT
Deposits and balances from foreign banks and other financial institutions	000 NZ1	000 KZ1
Current accounts of international financial organisations	582,114,441	508,023,480
OECD based banks	907,483	97,871
Other foreign banks	1,472,363	1,804,134
Total deposits and balances from foreign banks and other financial institutions	584,494,287	509,925,485
Deposits and balances from Kazakhstan banks and other financial institutions Loro accounts		
•		
Kazakhstan 10 top banks*	1,378,388,716	1,398,559,539
Other Kazakhstan banks and financial institutions	581,552,657	499,214,510
Deposits**		
Kazakhstan 10 top banks*	3,121,368,484	1,174,829,358
Other Kazakhstan banks and financial institutions	1,662,611,740	802,897,309
Total deposits and balances from Kazakhstan banks	6,743,921,597	3,875,500,716
Total deposits and balances from banks and other financial institutions	7,328,415,884	4,385,426,201

^{*} based on total assets as at 31 December 2020.

As at 31 December 2020 the National Bank has five counterparties (31 December 2019: three counterparties), whose balances exceed 10% of equity. The gross value of these balances as at 31 December 2020 is KZT 4,175,833,677 thousand (31 December 2019: KZT 1,745,431,948 thousand).

As at 31 December 2020 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 582,107,599 thousand (31 December 2019: KZT 508,016,638 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).

^{**} as at 31 December 2019 include the liability part of the swap deals in the amount of KZT 15,099,183 thousand that is accounted for not as derivatives, but as deposits from banks and is measured at nominal in accordance with the Basis of Accounting (Note 2).

28. REPURCHASE AGREEMENTS

In December 2020 the National Bank concluded repurchase agreements in the auto repo market of KASE JSC in the amount of KZT 100,597,147 thousand (31 December 2019: KZT 27,941,316 thousand).

As at 31 December 2020 the fair value of financial assets collateralising repurchase agreements is KZT 94,346,826 thousand (31 December 2019: KZT 27,284,433 thousand).

29. CURRENT ACCOUNTS OF THE NATIONAL FUND OF THE REPUBLIC OF KAZAKHSTAN

As at 31 December 2020 current accounts of the National Fund of the Republic of Kazakhstan (the "National Fund") amounted to KZT 441,555,267 thousand (31 December 2019: KZT 724,730,007 thousand).

During 2020 and 2019 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

	2020 '000 KZT	2019 '000 KZT
In national currency	959,663,575	394,704,948
In foreign currency	472,488,663	2,830,476
	1,432,152,238	397,535,424

31. CUSTOMER ACCOUNTS

	2020 '000 KZT	2019 '000 KZT
In national currency	238,954,354	180,136,454
In foreign currency	92,659	2,750,969
	239,047,013	182,887,423

During 2020 and 2019 NBK 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 2020 customer accounts did not include customers with a balance exceeding 2% of equity (31 December 2019: no customers).

32. DEBT SECURITIES ISSUED

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		***************************************	

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

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	•	•	

As at 31 December 2019 debt securities issued comprise the following issues:

Issues	Carrying amount	Date of issue	Date of maturity	Effective interest rate
KZW100010633	43,526,531	18/01/2019	17/01/2020	9.03
KZW100010831	37,652,064	08/02/2019	07/02/2020	9.12
KZW100010989	195,973,658	15/03/2019	13/03/2020	9.00
KZW100011045	48,447,859	05/04/2019	03/04/2020	8.96
KZW100011144	100,805,122	17/05/2019	15/05/2020	8.77
KZW100011193	51,630,387	07/06/2019	05/06/2020	8.92
KZW100011235	116,467,575	21/06/2019	19/06/2020	9.95
KZW100011284	359,360,113	12/07/2019	10/07/2020	9.97
KZW100011326	36,526,447	26/07/2019	24/01/2020	9.79
KZW100011367	87,574,882	09/08/2019	07/08/2020	9.97
KZW100011391	138,298,399	23/08/2019	21/02/2020	9.81
KZW100011425	56,986,940	06/09/2019	04/09/2020	10.00
KZW100011474	92,147,824	27/09/2019	27/03/2020	9.96
KZW100011508	51,678,763	11/10/2019	09/10/2020	10.17
KZW100011524	65,455,509	18/10/2019	17/01/2020	9.86
KZW100011532	86,688,017	16/10/2019	14/10/2020	10.17
KZW100011557	68,781,633	25/10/2019	24/04/2020	10.08
KZW100011573	114,828,473	01/11/2019	31/01/2020	9.89
KZW100011607	20,719,624	01/11/2019	30/10/2020	10.17
KZW100011623	24,296,935	08/11/2019	06/11/2020	10.19
KZW100011656	98,283,988	22/11/2019	22/05/2020	10.11
KZW100011680	50,817,055	06/12/2019	04/12/2020	10.20
KZW100011698	282,714,300	11/12/2019	08/01/2020	9.41
KZW100011706	256,588,732	18/12/2019	15/01/2020	9.41
KZW100011714	192,938,952	20/12/2019	20/03/2020	9.89
KZW100011722	326,087,700	25/12/2019	22/01/2020	9.39
KZW100011730	113,144,667	27/12/2019	26/06/2020	10.11
KZW100011748	259,632,313	31/12/2019	29/01/2020	9.37
	3,378,054,462	-		

Issues	Carrying amount	Date of issue	Date of maturity	Effective interest rate
KZ2C00005833	10,581,151	05/04/2019	05/04/2020	9.72
KZ2C00005833	10,581,505	12/04/2019	05/04/2020	9.72
KZ2C00005833	10,586,133	13/05/2019	05/04/2020	9.55
KZ2C00005833	7,413,093	29/05/2019	05/04/2020	9.38
KZ2C00005833	3,177,249	13/06/2019	05/04/2020	9.37
KZ2C00005833	9,419,156	14/06/2019	05/04/2020	9.43
KZ2C00005833	7,396,705	02/07/2019	05/04/2020	10.27
KZ2C00005833	11,621,052	16/07/2019	05/04/2020	10.35
KZ2C00005833	10,565,638	25/07/2019	05/04/2020	10.31
KZ2C00005833	10,563,370	08/08/2019	05/04/2020	10.39
KZ2C00005833	6,338,881	23/08/2019	05/04/2020	10.34
KZ2C00005833	7,506,823	27/08/2019	05/04/2020	10.31
KZ2C00006211	8,101,405	26/09/2019	26/09/2021	10.33
KZ2C00006211	2,478,655	03/10/2019	26/09/2021	10.49
KZ2C00006211	14,775,829	09/10/2019	26/09/2021	10.92
KZ2C00006211	22,621,838	11/10/2019	26/09/2021	11.01
KZ2C00006211	20,998,514	29/10/2019	26/09/2021	11.02
KZ2C00006328	19,424,407	15/11/2019	15/11/2021	10.92
KZ2C00006328	9,547,303	21/11/2019	15/11/2021	10.92
KZ2C00006328	19,113,164	28/11/2019	15/11/2021	10.90
KZ2C00006328	11,760,780	05/12/2019	15/11/2021	10.89
KZ2C00006328	971,663	12/12/2019	15/11/2021	10.90
KZ2C00006328	3,889,065	19/12/2019	15/11/2021	10.84
KZ2C00006336	1,333,058	26/12/2019	26/12/2022	10.88
	240,766,437			
	3,618,820,899	•		

Reconciliation of change in the debt securities issued and cash flows from financing activities

In 2020 and 2019 the change in the debt securities issued is as follows:

	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
	2019 '000 KZT
Balance at the beginning of the year	4,113,400,912
Notes issued, paid by cash	30,600,920,476
Nominal cost repaid	(31,124,090,128)
Total changes in cash flows from financing activities	(523,169,652)
Other changes	

33. ESTIMATED LIABILITIES

Interest accrued

Balance at the end of the year

Interest paid

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 598,376,004 thousand (31 December 2019: KZT 500,764,758 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 53,056,189 thousand (31 December 2019: KZT 33,162,428 thousand).

The table below shows analysis of movement in the provision for guarantees for the years ended 31 December 2020 and 31 December 2019:

	2020 '000 KZT	2019 '000 KZT
Provision for guarantees at 1 January	33,162,428	55,963,528
Changes affecting contributions to provision for estimated liabilities	-	
Change in risk parameters	14,197,985	9,543,579
Occurrence of default event (transfer from stage 2 to stage 3)	17,360,768	-
Significant increase in risk (transfer from stage 1 to stage 2)	418,280	5,170,455
Change in the amount of guaranteed compensation on deposits	5,671,895	_
Total expenses stated in profit or loss for the year	37,648,928	14,714,034
Transfer to liabilities to depositors due to liquidation	(17,755,167)	(37,515,134)
Provision for guarantees at 31 December	53,056,189	33,162,428

307,960,426

(279,370,787) **3.618.820.899**

33. ESTIMATED LIABILITIES, CONTINUED

Guarantee reserve movement

The change in the guarantee reserve for 2020 and 2019 is presented as follows:

'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 reserve measurement	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	

'000 KZT	2019				
	Stage 1	Stage 2	Stage 3	Total	
Guarantee reserve					
Balance at 1 January	18,448,394	-	37,515,134	55,963,528	
- Transfer to Stage 2	(5,170,455)	5,170,455	_	-	
Net reserve measurement	14,714,034	-	-	14,714,034	
Payment of guaranteed compensation due to the liquidation	_	_	(37,515,134)	(37,515,134)	
Balance at 31 December	27,991,973	5,170,455	-	33,162,428	

In 2020 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 17,755,167 thousand (2019: KZT 37,854,994 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 guaranteed 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

	2020 '000 KZT	2019 '000 KZT
Other creditors on non-banking activity	20,182833	14,287,979
Other creditors on banking activity	4,317,017	3,257,437
Total other financial liabilities	24,499,850	17,545,416
Salaries payable	7,293,138	6,063,447
Tax payable (except for corporate income tax)	1,326,586	1,480,208
Other prepayments received	416,645	994,087
Payables on purchase of property and equipment	297,381	246,343
Total other non-financial liabilities	9,333,750	8,784,085
Total other liabilities	33,833,600	26,329,501

As at 31 December 2020 other creditors on non-banking activity comprise obligations to pay for the purchase of gold from counterparties in the amount of KZT15,442,141 thousand, which were settled in January 2021 (31 December 2019: KZT 11,118,356 thousand), and lease liability in the amount of KZT 2,049,494 thousand (31 December 2019: KZT nil).

In 2020 KDIF JSC recognised liabilities on payment of guaranteed compensation to the depositors of the banks being liquidated. The amount of liabilities thereon was KZT 17,755,167 thousand (2019: KZT 37,854,994 thousand). The payment of guaranteed compensation was made through the agent bank. As at 31 December 2020 the remaining portion of the liability on payment of guaranteed compensation is KZT 2,255,315 thousand (31 December 2019: KZT 1,327,982 thousand).

35. CHARTER CAPITAL

Share 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 2020 and 31 December 2019 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 2020, the capital reserve was nil (31 December 2019: nil).

35. CHARTER CAPITAL, CONTINUED

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", 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 share 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 guarantee of deposits placed in 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 share capital as at 31 December 2020 and 2019 is KZT 598,376,004 thousand or 5.5% and KZT 500,764,758 thousand or 5.4% of gross amount of guaranteed deposits in participating banks, respectively.

	2020 '000 KZT	2019 '000 KZT
Calendar contributions of banks participating in the deposit guarantee system	256,051,123	242,868,293
Amount of compensation made by a liquidation commission of a forcibly liquidated bank	25,582,193	17,359,058
Fines and penalties paid by banks participating in the deposit guarantee system	61,024	50,099
Formation of reserve out of own funds in accordance with the Law	55,600,000	55,600,000
Net income allocated for formation of special guarantee reserve	261,081,664	184,887,308
Special guarantee reserve	598,376,004	500,764,758

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 share 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 share capital.

36. ANALYSIS BY SEGMENT

The National Bank's operations comprise a single operating segment for the purposes of these consolidated financial statements. 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 National Bank 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 NBK 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 and/or 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.

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.

Market risk, continued

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 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).

As at 31 December 2019 the benchmark portfolio for the investment portfolio of gold and foreign currency assets was a composite index of:

- ▶ 52% ICE BofAML 0-3 Year US Treasury Index (G1QA);
- ▶ 15% ICE BofAML 0-3 Year Germany, France, Netherlands, Austria, Luxembourg & Finland Government Index (EBDF);
- ▶ 10% ICE BofAML 0-3 Year UK Gilt Index (GBL0);
- ▶ 8% ICE BofAML 0-3 Year Australia Government Index (GJBT);
- ► 5% ICE BofAML 0-3 Year Japan Government Index (G1YA);
- ▶ 5% ICE BofAML 0-3 Year All Maturity Canadian Government Index (GBCJ);
- ▶ 5% ICE BofAML 0-3 Year South Korean Government Index (GBSK).

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.

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.

Market risk, continued

Interest rate risk, continued

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 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
KZT'000	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

Market risk, continued

Interest rate risk, continued

Interest rate gap analysis, continued

KZT'000	Less than 3 months	3-6 months	6-12 months	1-5 years	More than 5 years	Non-interest bearing	Carrying amount
31 December 2019							
ASSETS		-		•	-		-
Cash on hand in foreign currency	_	-	-	-	_	113,367,726	113,367,726
Gold	881,427,572	194,067,835	295,997,216	-	_	5,858,648,339	7,230,140,962
Placements and loans with banks and other financial institutions	886,155,515	_	10,668,033	_	964,145,833	719,791,711	2,580,761,092
Financial instruments under management at fair value through profit or loss	592,356	_	-	_	_	367,240,834	367,833,190
Reverse repurchase agreements	145,868,206	-	-	-	-	-	145,868,206
Investment securities measured at fair value through other comprehensive income	232,179,134	110,850,380	85,513,756	1,289,217,932	704,260,939	855,231,086	3,277,253,227
Investment securities measured at amortised cost	9,332,144	19,068,344	32,092,523	292,218,462	633,081,054	-	985,792,527
Other financial assets	4,958	3,269	9,796	3,883,358	247,742,863	15,041,892	266,686,136
	2,155,559,885	323,989,828	424,281,324	1,585,319,752	2,549,230,689	7,929,321,588	14,967,703,066

KZT'000	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	-	-	-	-	-	2,688,747,786	2,688,747,786
Deposits and balances from banks and other financial institutions	1,943,481,776	19,145,707	15,175,701	-	-	2,407,623,017	4,385,426,201
Financial instruments under management at fair value through profit or loss	178,391	-	-	_	-	755,824	934,215
Repurchase agreements	27,941,316	_	-	-	-	-	27,941,316
Current accounts of the National Fund of the Republic of Kazakhstan	_	-	_	_	_	724,730,007	724,730,007
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	394,704,948	-	-	_	-	2,830,476	397,535,424
Customer accounts	-	_	_	_	-	182,887,423	182,887,423
Debt securities issued	2,042,370,902	703,311,987	738,122,328	135,015,682	-	_	3,618,820,899
Estimated liabilities	-	_	-	-	-	33,162,428	33,162,428
Other financial liabilities	_	-	_	_	-	17,545,416	17,545,416
	4,408,677,333	722,457,694	753,298,029	135,015,682	-	6,058,282,377	12,077,731,115
	(2,253,117,448)	(398,467,866)	(329,016,705)	1,450,304,070	2,549,230,689	1,871,039,211	2,889,971,951

Market risk, continued

Interest rate risk, continued

Average effective interest rates

The table below shows average effective interest rates for interest-bearing financial assets and financial liabilities as at 31 December 2020 and 31 December 2019. These interest rates are an approximation of the yields to maturity of these assets and liabilities.

	2020 KZT'000 Carrying amount	Average effective interest rate, %	2019 KZT'000 Book value	Average effective interest rate, %
Interest bearing assets				
Gold		-		
Gold deposits with foreign banks	781,012,832	0.02	1,371,492,623	0.03
Placements and loans with banks and other financial institutions		-		
Nostro accounts		-		
- EUR	878,093,322	0.64	228,886,883	0.59
- Other currency	40,004,149	0.91	3,896,491	0.73
- JPY	3,652,450	0.13	339,662,264	0.29
- RUB	945,259	2.00	16,362,042	2.00
- USD	51,822	0.30	282,243,204	1.44
- GBP	50,487	0.30	_	_
- KRW	456	0.15	124,036	0.10
Loans and deposits with banks		-		
- KZT	1,662,322,573	6.00	989,794,461	6.65

	2020 KZT'000 Carrying amount	Average effective interest rate, %	2019 KZT'000 Book value	Average effective interest rate, %
Financial instruments under management at fair value through profit or loss				
- KZT	-	_	592,356	10.09
Reverse repurchase agreements		•		
- in KZT	20,012,508	10.00	145,868,206	8.63
Investment securities measured at fair value through other comprehensive income				
- USD	1,554,250,824	2.97	1,318,003,077	3.42
- KZT	547,448,409	8.18	592,960,274	8.16
- EUR	267,131,287	1.62	262,104,826	1.22
- GBP	114,492,558	1.56	84,254,345	2.57
- CAD	65,047,361	2.01	52,139,101	2.01
- AUD	56,186,390	2.78	54,453,652	3.65
- JPY	29,829,592	0.79	29,658,859	0.38
- KRW	_	_	28,448,007	2.68

Market risk, continued

Interest rate risk, continued

Average effective interest rates, continued

	2020 KZT'000 Carrying amount	Average effective interest rate, %	2019 KZT'000 Book value	Average effective interest rate, %
Investment securities measured at amortised cost				
- KZT	1,026,726,874	7.82	907,699,125	7.46
- CNY	95,086,645	2.71	77,974,390	3.12
- USD	130,216	3.20	119,012	3.20
Other assets				
- KZT	540,893,545	6.22	251,644,244	4.91
Interest bearing liabilities			-	
Deposits and balances from banks and other financial institutions				
Term deposits				
- USD	2,874,654,006	0.29	923,234,617	0.77
- KZT	1,909,326,218	8.56	1,054,492,049	8.85
Loans				
- KZT	-	_	76,518	5.00
Financial instruments under management at fair value through profit or loss				
- RUB	_	_	178,391	5.65
Repurchase agreements				
- KZT	100,597,147	8.00	27,941,316	8.25
Unified Treasury Account		_	_	
- KZT	959,663,575	0.25	394,704,948	0.25
Debt securities issued	-		-	
- KZT	3,645,971,357	9.73	3,618,820,899	9.56

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 rise or fall in all yield curves and positions of interest-bearing assets and liabilities existing as at 31 December 2020 and 31 December 2019 is as follows:

	2020		2019	
	Profit or loss KZT'000	Equity '000 KZT	Profit or loss KZT'000	Equity '000 KZT
300 bp parallel rise	(138,975,275)	(138,975,275)	(58,722,226)	(58,722,226)
300 bp parallel fall	138,975,275	138,975,275	58,722,226	58,722,226

An analysis of the sensitivity of profit or loss and equity as a result of changes in the fair value of financial instruments at fair value through profit or loss and investment securities at fair value through other comprehensive income due to changes in the interest rates, based on positions existing as at 31 December 2020 and 2019 and a simplified scenario of a 50 bp symmetrical rise or fall in all yield curves, is as follows:

	2020		2019	
	Net profit or loss KZT'000	Equity KZT'000	Net profit or loss KZT'000	Equity KZT'000
50 bp parallel fall	_	40,515,904	_	42,330,398
50 bp parallel rise	_	(46,919,451)	_	(44,182,322)

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 reality, 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.

The sensitivity analysis 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.

Market risk, continued

Currency risk

The National Bank has assets and liabilities denominated in several foreign currencies.

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The following table shows the National Bank's foreign currency exposure structure of financial assets and liabilities as at 31 December 2020:	National Bank's f	oreign currenc)	/ exposure stru	cture of financia	l assets and lia	abilities as at 37	1 December 20	.020:	
KZT'000	KZT	Plo5	OSD	EUR	JPY	SDR	GBP	Other	Total
ASSETS									
Cash on hand in foreign currency	-	1	121,562,192	1,204,434	8,356	1	55,657	49,215	122,879,854
Gold	ı	9,946,269,671	ı	ı	ı	ı	1	ı	9,946,269,671
Placements and loans with banks and other financial institutions	1,659,159,182	I	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	-	I	632,741,794	16,041	25,753	I	37,231	205,107	633,025,926
Reverse repurchase agreements	20,012,508	l	l	ı	ı	ı	-	1	20,012,508
Investment securities measured at fair value through other comprehensive income	1,297,448,409	I	1,701,478,143	313,606,871	33,306,273	1	116,363,610	121,233,751	3,583,437,057
Investment securities measured at amortised cost	1,026,726,874	-	130,216	1	_	-	1	95,086,645	1,121,943,735
Investments in associates	5,683,549	1	l	-	ı	ı	1	1	5,683,549
Other financial assets	973,217,684	ı	ı	ı	ı	ı	ı	ı	973,217,684
Total assets	4,982,248,206	9,946,269,671	3,760,636,980	1,203,742,101	45,360,799	705,899,076	124,502,020	268,716,692	21,037,375,545

Market risk, continued

Currency risk, continued

KZT'000	KZT	Gold	OSD	EUR	JPY	SDR	GBP	Other	Total
LIABILITIES									
Currency in circulation	3,250,868,479	1	ı	ı	ı	ı	ı	ı	3,250,868,479
Deposits and balances from banks and other financial institutions	2,900,520,773	1	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	I	448,267	259,538	7,055	I	44,506	207,741	968,165
Repurchase agreements	100,597,147	1	ı	ı	ı	ı	ı	ı	100,597,147
Current accounts of the National Fund of the Republic of Kazakhstan	441,555,267	l	l	l	ı	l	1	ı	441,555,267
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	959,663,575	I	41,530	469,553,327	I	1	I	2,893,806	1,432,152,238
Customer accounts	238,954,354		65,647	26,969	ı	ı	17	26	239,047,013
Debt securities issued	3,645,971,357	ı	ı	ı	ı	1	ı	1	3,645,971,357
Estimated liabilities	53,056,189	ı	ı	ı	ı	ı	ı	ı	53,056,189
Other financial liabilities	21,555,779	1	2,943,864	207	ı	1	ı	ı	24,499,850
Total liabilities	11,612,743,978	1	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	19,889,617	l	(19,890,675)	l	I	l	I	I	(1,058)
Net position after derivatives held for risk management purposes	(6,610,606,155)	9,946,269,671	324,375,281	333,320,610	34,130,065	123,791,476	121,160,799	247,801,151	4,520,242,898

Market risk, continued

Currency risk, continued

The following table shows the currency structure of assets and liabilities at 31 December 2019 (restated):

KZT'000	KZT	Plo9	OSD	EUR	ЛРY	SDR	GBP	Other	Total
ASSETS									
Cash on hand in foreign currency	ı	ı	112,273,640	988,928	7,191	ı	48,738	49,229	113,367,726
Gold	1	7,230,140,962	1	ı	ı	1	1	1	7,230,140,962
Placements and loans with banks and other financial institutions	995,233,227	I	348,123,375	238,773,503	345,245,722	615,733,251	12,163,675	25,488,339	2,580,761,092
Financial instruments under management at fair value through profit or loss	699,588	I	366,846,541	128,506	880	ı	39,249	118,426	367,833,190
Reverse repurchase agreements	145,868,206	ı	ı	ı	ı	ı	ı	l	145,868,206
Investment securities measured at fair value through other comprehensive income	1,342,960,273	I	1,393,929,217	290,440,230	12,466,502	ı	100,071,220	137,385,785	3,277,253,227
Investment securities measured at amortised cost	907,699,125	I	119,012	ı	I	I	I	77,974,390	985,792,527
Investments in associates	2,291,347	1	1	1	1	1	1	1	2,291,347
Other financial assets	266,686,099	1	1	37	I	I	I	1	266,686,136
Total assets	3,661,437,865 7,230,140,962	7,230,140,962	2,221,291,785	530,331,204	357,720,295	615,733,251	112,322,882	241,016,169	241,016,169 14,969,994,413

Market risk, continued

Currency risk, continued

KZT,000	K7T	700	G		À	aus	GRD	Other	Total
LIABILITIES	į				5		5		
Currency in circulation	2,688,747,786	1	1	1	ı	-	1	I	2,688,747,786
Deposits and balances from banks and other financial institutions	1,482,880,456	374	1,719,865,609	334,432,188	319,195,287	508,016,638	5,202,481	15,833,168	4,385,426,201
Financial instruments under management at fair value through profit or loss	-	I	454,304	55,696	47,114	1	16,281	360,820	934,215
Repurchase agreements	27,941,316	ı	ı	ı	ı	ı	ı	ı	27,941,316
Current accounts of the National Fund of the Republic of Kazakhstan	724,730,007	I	l	l	l	l	ı	I	724,730,007
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	394,704,948	I	70,527	I	I	I	I	2,759,949	397,535,424
Customer accounts	180,136,454		2,693,054	54,369	ı	ı	113	3,433	182,887,423
Debt securities issued	3,618,820,899	ı	ı	ı	1	ı	1	T	3,618,820,899
Estimated liabilities	33,162,428	ı	ı	ı	ı	ı	ı	ı	33,162,428
Other financial liabilities	15,263,968	ı	2,278,788	2,660	ı	ı	ı	ı	17,545,416
Total liabilities	9,166,388,262	374	1,725,362,282	334,544,913	319,242,401	508,016,638	5,218,875	18,957,370	12,077,731,115
Net position	(5,504,950,397)	7,230,140,588	495,929,503	195,786,291	38,477,894	107,716,613	107,104,007	222,058,799	2,892,263,298
The effect of derivatives held for risk management	39,706,245	I	(114,777,000)	114,810,767	l	I	I	(39,706,245)	33,767
Net position after derivatives held for risk management purposes	(5,465,244,152)	7,230,140,588	381,152,503	310,597,058	38,477,894	107,716,613	107,104,007	182,352,554	2,892,297,065

Market risk, continued

Currency risk, continued

Management of the National Bank believes that, as at 31 December 2020, given the current economic conditions in Kazakhstan, fluctuation of exchange rate by 20% is a realistic movement in KZT exchange rates against US Dollar. 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 2020.

A weakening of the KZT, as indicated below, against the following currencies at 31 December 2020 and 2019, 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 report on currency risk to 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
	2020	2019
	(+20% / -20%)	(+20%/-20%)
Appreciation of USD against KZT	64,875,056	76,230,501
Depreciation of USD against KZT	(64,875,056)	(76,230,501)
Appreciation of EUR against KZT	66,664,122	62,119,412
Depreciation of EUR against KZT	(66,664,122)	(62,119,412)
Appreciation of Troy ounce of gold against KZT	1,989,253,934	1,446,028,118
Depreciation of Troy ounce of gold against KZT	(1,989,253,934)	(1,446,028,118)
Appreciation of JPY against KZT	6,826,013	7,695,579
Depreciation of JPY against KZT	(6,826,013)	(7,695,579)
Appreciation of GBP against KZT	24,232,160	21,420,801
Depreciation of GBP against KZT	(24,232,160)	(21,420,801)
Appreciation of SDR against KZT	24,758,295	21,543,323
Depreciation of SDR against KZT	(24,758,295)	(21,543,323)
Appreciation of other currencies against KZT	49,560,230	36,470,511
Depreciation of other currencies against KZT	(49,560,230)	(36,470,511)

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 tenge exchange rate, while other assumptions remain unchanged. In reality, 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.

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 net profit or loss and equity to changes in securities prices (based on positions existing as at 31 December 2020 and 2019 and a simplified scenario of a 10% change in all securities prices) is as follows:

	202	20	20	19
	Profit or loss KZT'000	Equity KZT'000	Profit or loss KZT'000	Equity KZT'000
10% increase in securities prices	63,252,523	75,549,603	36,639,102	76,952,615
10% decrease in securities prices	(63,252,523)	(75,549,603)	(36,639,102)	(76,952,615)

Credit risk

Credit risk is the risk of financial loss to the National Bank if a customer, emitter 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:

- ► 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.

Credit risk, continued

The maximum exposure to credit risk from financial assets at the reporting date is as follows:

	2020 KZT'000	2019 KZT'000
ASSETS		
Gold	781,012,832	1,371,492,623
Placements and loans with banks and other financial institutions	4,630,905,561	2,580,761,092
Financial instruments under management at fair value through profit or loss	633,025,926	367,833,190
Reverse repurchase agreements	20,012,508	145,868,206
Investment securities measured at fair value through other comprehensive income	2,827,941,031	2,507,727,077
Investment securities measured at amortised cost	1,121,943,735	985,792,527
Other financial assets	973,217,684	266,686,136
Total maximum exposure	10,988,059,277	8,226,160,851

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.

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 provides and accepts collateral in the form of marketable securities in respect of the sales and repurchase agreements, reverse sale and repurchase agreements.

Offsetting financial assets and financial liabilities, continued

The table below shows financial assets and financial liabilities subject to enforceable master netting arrangements and similar arrangements as at 31 December 2020.

KZT'000	Gross amounts of recognised financial asset/	Gross amount of recognised financial liability/	Net amount of financial assets/ liabilities presented	Related amount the consolidated financial	d statement of	Net amount
Types of financial assets/liabilities	— liability	asset offset in the consolidated statement of financial position	in the consolidated statement of financial position	Financial instruments	Cash collateral received	
Reverse repurchase agreements	20,012,508	_	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)

The following table provides information on financial assets and financial liabilities subject to enforceable master netting arrangements and similar arrangements as at 31 December 2019.

KZT'000	Gross amounts of recognised financial asset/	Gross amount of recognised financial liability/	Net amount of financial assets/liabilities		ounts not offset in ated statement of financial position	Net amount	
Types of financial assets/liabilities	- liability	asset offset in the consolidated statement of financial position	presented in the consolidated statement of financial position	Financial instruments	Cash collateral received		
Placements and loans with banks and other financial institutions	10,669,586	-	10,669,586	(10,669,586)	-	-	
Reverse repurchase agreements	145,868,206	_	145,868,206	(145,868,206)	-	-	
Investment securities measured at fair value through other comprehensive income	27,284,433	_	27,284,433	(27,284,433)	_	_	
Total financial assets	183,822,225	-	183,822,225	(183,822,225)	-	-	
Deposits and balances from banks and other financial institutions	(15,099,183)		(15,099,183)	10,669,586	_	(4,429,597)	
Repurchase agreements	(27,941,316) – (27,941,316) 27,941,316	- (27,941,3	- (27	(27,941,316) 27,941,316	.,316) 27,941,316	_	
Total financial liabilities	(43,040,499)	_	(43,040,499)	38,610,902	-	(4,429,597)	

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.

Offsetting financial assets and financial liabilities, continued

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

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 2019.

KZT'000	Net amount	Line item in the consolidated	Carrying amount in the consolidated	Financial asset/ liability not in	Note
Types of financial assets/ liabilities		statement of financial position	statement of financial position	the scope of offsetting disclosure	
Placements and loans with banks and other financial institutions	10,669,586	Placements and loans with banks and other financial institutions	2,580,761,092	2,570,091,506	19
Reverse repurchase agreements	145,868,206	Reverse repurchase agreements	145,868,206	_	21
Investment securities measured at fair value through other comprehensive income	27,284,433	Investment securities measured at fair value through other comprehensive income	3,277,253,227	3,249,968,794	22
Deposits and balances from banks and other financial institutions	(15,099,183)	Deposits and balances from banks and other financial institutions	(4,385,426,201)	(4,370,327,018)	27
Repurchase agreements	(27,941,316)	Repurchase agreements	(27,941,316)	_	28

Liquidity risk

Liquidity risk is the risk that the National Bank will encounter difficulty in meeting 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 management regulation 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.

Liquidity risk, continued

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 taking into account 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");
- developing contingency plans for maintaining liquidity and funding;
- 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 to assets that can be sold at market price as soon as it possible if required.

According to the Investment Strategy of Gold and Foreign Exchange Reserves, 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 guarter (on the tenth working day of each guarter).

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.

The assets of the liquidity portfolio may be invested in cash currency, state (sovereign) debt securities of the countries with credit rating not lower than A- (Standard & Poor's) and/or A3 Moody's, agency debt securities, debt securities of international financial institutions with credit rating not lower than AAA (Standard & Poor's) and/or Aaa (Moody's), regional (municipal) debt securities of the countries with credit rating not lower than A- (Standard & Poor's) and/or A3 (Moody's), certificates of deposit (CD), commercial papers (CP) with 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.

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)	Total gross Carrying amount inflow (outflow)
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	l	582,517,441	7,329,797,308	7,328,415,884
Repurchase agreements	100,685,323	ı	1	1	ı	ı	100,685,323	100,597,147
Current accounts of the National Fund of the Republic of Kazakhstan	441,555,267	I	l	I	I	l	441,555,267	441,555,267
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	1,432,356,023	I	l	I	I	I	1,432,356,023	1,432,152,238
Customer accounts	239,047,013	ı	1	1	Ι	ı	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	T	3,927,983,035	3,645,971,357
Estimated liabilities	53,056,189	1	1	1	1	1	53,056,189	53,056,189
Other financial liabilities	24,499,850	1	1	1	1	1	24,499,850	24,499,850
Derivative liabilities								
- Inflow	(36,871,389)	(103,127,515)	1	1	1	1	(139,998,904)	1
- Outflow	37,333,734	94,907,700	1	1	1	1	132,241,434	968,165
Total liabilities	9,847,492,079	1,302,265,083	902,042,965	334,714,698	572,190,272	582,517,441	13,541,222,538	13,266,263,110
Credit related commitments	367,450,597	1	I	1	1	1	367,450,597	367,450,597

Liquidity risk, continued

The maturity analysis for financial liabilities as at 31 December 2019 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	3,843,532,963	l	19,178,652	15,175,701	I	508,389,168	4,386,276,484	4,385,426,201
Repurchase agreements	27,966,572	ı	ı	ı	ı	ı	27,966,572	27,941,316
Current accounts of the National Fund of the Republic of Kazakhstan	724,730,007	-	1	1	I	1	724,730,007	724,730,007
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	397,619,240	-	1	1	I	1	397,619,240	397,535,424
Customer accounts	182,887,423	ı	ı	1	1	ı	182,887,423	182,887,423
Debt securities issued	1,276,290,281	784,790,104	719,724,715	785,596,952	138,016,000	ı	3,704,418,052	3,618,820,899
Estimated liabilities	33,162,428	ı	ı	ı	1	ı	33,162,428	33,162,428
Other financial liabilities	17,545,416	ı	l	1	1	ı	17,545,416	17,545,416
Derivative liabilities								
- Inflow	(186,199,454)	1	ı	1	ı	ı	(186,199,454)	1
- Outflow	218,708,528	Ι	1	1	ı	ı	218,708,528	934,215
Total liabilities	6,536,243,404	784,790,104	738,903,367	800,772,653	138,016,000	508,389,168	9,507,114,696	9,388,983,329
Credit related commitments	338,371,970	1	1	1	1	1	338,371,970	338,371,970

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 nave simultaneous gross settlement (e.g., forward exchange contracts and currency swaps)

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 F 12 months	From 3 to From 1 to 5 years 2 months	Over 5 years	Over 5 years No maturity date	Total
ASSETS							
Cash on hand in foreign currency	122,879,854	ı	1	l	1	ı	122,879,854
Gold	452,881,456	300,653,693	47,759,093	1	1	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	_	-	1	632,525,226	633,025,926
Reverse repurchase agreements	20,012,508	-	-	-	1	-	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	ı	14,481,523	153,462,063	184,163,170	769,836,979	ı	1,121,943,735
Investments in associates	1	ı	1	ı	ı	5,683,549	5,683,549
Other financial assets	17,296,978	3,654,579	424,659,212	102,605,021	425,001,894	ı	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

Liquidity risk, continued

KZT'000	Demand and less than 1 month	From 1 to 3 months	From 3 to 12 months	From 3 to From 1 to 5 years 2 months	Over 5 years	Over 5 years No maturity date	Total
LIABILITIES							
Currency in circulation	-	-	1	-	-	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	ı	l	582,107,600	7,328,415,884
Financial instruments under management at fair value through profit or loss	464,461	503,704	1	1	-	_	968,165
Repurchase agreements	100,597,147	-	-	-	ı	-	100,597,147
Current accounts of the National Fund of the Republic of Kazakhstan	441,555,267	1	ı	T	1	I	441,555,267
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	1,432,152,238	-	I	I	-	-	1,432,152,238
Customer accounts	239,047,013	ı	ı	ı	ı	ı	239,047,013
Debt securities issued	1,417,890,747	940,779,240	728,229,532	331,206,463	227,865,375	1	3,645,971,357
Estimated liabilities	53,056,189	1	ı	ı	ı	1	53,056,189
Other financial liabilities	24,499,850	ı	ı	ı	1	1	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

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 2019:

KZT'000	Demand and less than 1 month	From 1 to 3 months	From 3 to F	From 3 to From 1 to 5 years 2 months	Over 5 years	Over 5 years No maturity date	Total
ASSETS							
Cash on hand in foreign currency	113,367,726	ı	I	I	ı	1	113,367,726
Gold	829,088,387	60,817,232	490,065,051	ı	ı	5,850,170,292	7,230,140,962
Placements and loans with banks and other financial institutions	978,594,222	14,119,456	10,668,033	1	964,516,277	612,863,104	2,580,761,092
Financial instruments under management at fair value through profit or loss	265,385	1,176,790	1	1	1	366,391,015	367,833,190
Reverse repurchase agreements	86,147,299	59,720,907	-	ı	ı	1	145,868,206
Investment securities measured at fair value through other comprehensive income	29,437,133	85,604,284	132,016,880	1,550,807,912	705,037,864	774,349,154	3,277,253,227
Investment securities measured at amortised cost	ı	9,332,144	51,160,867	292,218,462	633,081,054	ı	985,792,527
Investments in associates	ı	ı	ı	ı	ı	2,291,347	2,291,347
Other financial assets	15,046,712	138	13,065	3,883,358	247,742,863	ı	266,686,136
Total assets	2,051,946,864	230,770,951	683,923,896	1,846,909,732	2,550,378,058	7,606,064,912	14,969,994,413

Liquidity risk, continued

777,000	Domond and loss		0,000 0 to	From 2 +0 From 1 +0 From 2	Cross E voc	No motivities dots	
000	than 1 month	3 months	12 months	rioii i to 3 years	ovel 5 years		lotai
LIABILITIES							
Currency in circulation	1	ı	ı	ı	ı	2,688,747,786	2,688,747,786
Deposits and balances from banks and other financial institutions	3,843,088,155	1	34,321,408	l	-	508,016,638	4,385,426,201
Financial instruments under management at fair value through profit or loss	228,195	706,020	I	l	-	-	934,215
Repurchase agreements	27,941,316	1	1	1	1	1	27,941,316
Current accounts of the National Fund of the Republic of Kazakhstan	724,730,007	l	l	l	Ι	I	724,730,007
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	397,535,424	1	l	1	-	-	397,535,424
Customer accounts	182,887,423	ı	ı	ı	1	ı	182,887,423
Debt securities issued	1,270,531,533	771,839,369	1,441,434,315	135,015,682	1	1	3,618,820,899
Estimated liabilities	33,162,428	1	1	1	1	1	33,162,428
Other financial liabilities	17,545,416	I	1	1	I	1	17,545,416
Total liabilities	6,497,649,897	772,545,389	1,475,755,723	135,015,682	ı	3,196,764,424	12,077,731,115
Net position	(4,445,703,033)	(541,774,438)	(791,831,827)	1,711,894,050	2,550,378,058	4,409,300,488	2,892,263,298

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 provides financial guarantees and letters of credit to guarantee the performance of customers to third parties. These agreements have fixed limits and generally extend for a 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.

	2020 KZT'000	2019 KZT'000
Contracted amount		
Investment commitments	362,390,222	337,305,007
Loan and credit line commitments	5,036,507	1,049,231
Guarantees an letters of credit	23,868	17,732
	367,450,597	338,371,970

All credit related commitments relate to Stage 1 of credit risk.

NIC NBK JSC implements the program of investments in alternative classes of assets through a special purpose companies and/or partnerships. As at 31 December 2020, they have payment liabilities of KZT 362,390,222 thousand to private equity funds and real estate funds (31 December 2019: KZT 37,305,007 thousand). These credit related commitments can be changed.

The total outstanding contractual commitments above do not necessarily represent future cash outflows, as these credit related commitments may expire or terminate without partial or complete fulfilment.

39. CONTINGENT LIABILITIES

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.

Litigation

Management is unaware of any significant actual, pending or threatened claims against the National Bank.

39. CONTINGENT LIABILITIES, CONTINUED

Taxation contingencies

The taxation system in the Republic of 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, including opinions with respect to IFRS treatment of revenues, expenses and other items in the financial statements. Taxes are subject to review and investigation by a number of authorities, which have the authority to impose severe fines, penalties 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 substantially more significant than in other countries. Management believes that it has provided adequately for tax liabilities based on its interpretations of applicable Kazakhstan 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 ACTVITIES

Funds management and trust management activities

The National Bank provides trust and asset management services to trust companies, pension funds 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 2020 the total amount of assets that the National Bank holds and manages for outside organisations is KZT 2,920,805,765 thousand (31 December 2019: KZT 3,005,069,993 thousand).

As at 31 December 2020 the total amount of assets that the National Bank holds and manages for the National Fund is KZT 25,886,664,948 thousand (31 December 2019: KZT 25,105,963,753 thousand). A portion of these funds is managed by external managers in accordance with the investment policies set by the NBK.

Custody activities

During 2020 and 2019 the National Bank provided custody services to UNPF JSC. As at 31 December 2020 the total amount of assets of UNPF JSC under the custodial service of the National Bank equals to KZT 12,894,602,814 thousand (31 December 2019: KZT 10,798,305,943 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 85,932,691,243 thousand (31 December 2019: KZT 66,944,975,992 thousand).

41. RELATED PARTY TRANSACTIONS

Transactions with members of the Board of Directors and the Management Board

The remuneration to the members of the National Bank's Management Board and the Board of Directors for the year ended 31 December 2020, comprised KZT 862,149 thousand (2019: KZT 826,770 thousand). The remuneration consists of salary and other payments.

TRANSACTIONS WITH OTHER RELATED PARTIES

The outstanding balances and the related average interest rates as at 31 December 2020 and 31 December 2019 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 Deceml	per 2020	Resta 31 Deceml	* * *
_	KZT'000	Average effective interest rate, %	KZT'000	Average effective interest rate, %
Consolidated Statement of Financial Position				
ASSETS				
Gold	19,652,137	_	_	_
Placements and loans with banks and other financial institutions	885,095,436	6.06	451,256,947	8.86
Reverse repurchase agreements	20,012,508	10.00	73,020,506	10.25
Investment securities at FVOCI:				
Equity securities	750,000,000	_	750,000,000	_
Debt securities	547,448,409	8.18	592,960,274	8.16
Investment securities measured at amortised cost	830,710,297	8.39	720,876,946	8.05
Current tax asset	2,481,329	-	1,157,892	_
Deferred tax assets	325,613,503	-	234,344,611	-
Other assets	8,746,582	-	13,475,343	-

41. RELATED PARTY TRANSACTIONS, CONTINUED

Transactions with other related parties, continued

		State companies a	nd organisations	
	31 Dece	ember 2020	Restated 31 D	ecember 2019
	KZT'000	Average effective interest rate, %	KZT'000	Average effective interest rate, %
LIABILITIES				
Deposits and balances from banks and other financial institutions	807,474,455	5.36	704,194,880	6.16
Repurchase agreements	100,597,147	8.00	27,941,316	8.25
Current accounts of the National Fund of the Republic of Kazakhstan	441,555,267	_	724,730,007	_
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	1,432,152,238	0.17	397,535,424	0.25
Customer accounts	237,851,911	_	178,723,600	_
Current tax liability	166	-	146	-
Deferred tax liabilities	2,406,637	-	2,483,478	-
Other liabilities	6,413,823	-	6,475,662	_

	State companies	and organisations
	2020	Restated 2019
	KZT'000	KZT'000
Consolidated statement of profit or loss		
Interest income calculated using the effective interest method	156,173,752	187,413,373
Interest expense	(51,092,967)	(50,856,002)
Fee and commission income	19,016,099	20,305,694
Fee and commission expense	(529,150)	(1,157,734)
Net gain on financial instruments measured at fair value through other comprehensive income	7,826,628	3,542,634
Other operating income/(expense), net	824,688	(27,055)
Banknotes and coins production expenses	(110,256)	(35,892)
Personnel expenses	(1,324,090)	(1,694,622)
Other general administrative expenses payments	(2,348,853)	(2,144,825)
Income tax benefit	89,716,100	120,925,766

Accounting classifications and fair values

The table below sets out the carrying amounts and fair values of financial assets and financial liabilities as at 31 December 2020:

Assers Cash on hand in foreign currency Gold Placements and loans with banks and other financial institutions Financial instruments under management at fair value through profit or loss Reverse repurchase agreements Investment securities measured at fair value through other comprehensive income through other comprehensive income through other comprehensive at amortised cost — — — — — — — — — — — — — — — — — — —	Measured at FVOCI (debt) FVTPL	FVOCI (equity)	Other at amortised cost	Total carrying amount	Fair value
on hand in foreign currency on hand in foreign currency 9,946,269,671 — — — — — — — — — — — — — — — — — — —					
ments and loans with banks and other yeldinstitutions cial institutions cial instruments under management at fair through profit or loss se repurchase agreements through profit or loss through profit or loss se repurchase agreements the securities measured at fair value gh other comprehensive income the securities measured at amortised cost financial assets financial assets	-		122,879,854	122,879,854	122,879,854
s with banks and other	1	1	1	9,946,269,671	9,946,269,671
r management at fair - 633,025,926 rents - - rured at fair value - - ve income - - urred at amortised cost - -	.561	l	4,338,690,000	4,630,905,561	4,630,905,561
r value – – – – – – – – – – – – – – – – – – –		l	-	633,025,926	633,025,926
r value – – nortised cost – – – – – – – – – – – – – – – – – – –	-	ı	20,012,508	20,012,508	19,121,142
1 1	- 2,827,941,030	5,496,027	I	2,833,437,057	2,833,437,057
_	-	1	1,121,943,735	1,121,943,735	1,011,484,991
	-		973,217,684	973,217,684	973,217,684
9,946,269,671 925,241,487 2,	487 2,827,941,030	5,496,027	6,576,743,781	20,281,691,996	20,170,341,886

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

Accounting classifications and fair values, continued

The table below sets out the carrying amounts and fair values of financial assets and financial liabilities as at 31 December 2019:

ASSETS ASSETS 4 ASSETS 113,367,726 114,368,126 114,368,126 114,368,126 114,368,206 114,36	KZT'000	Measured at fair value under Accounting Policy (Note 2)	Measured at FVTPL	FVOCI (debt)	FVOCI (equity)	Other at amortised cost	Total carrying amount	Fair value
on hand in foreign currency 7,230,140,962 ments and loans with banks and other recial institutions cial institutions trincing brother management at fair through profit or loss trength sequence agreements The ment securities measured at amortised cost the ment securities are securities and the ment	ASSETS							
ments and loans with banks and other banks and other and loans with banks and other cial institutions - - - 7,230,140,962 bial institutions 370,283,443 - - - 2,199,808,063 2,570,091,506 cial institutions cial institutions - 367,833,190 - - 367,833,190 through profit or loss - - - - 145,868,206 145,868,206 se repurchase agreements - - - - 145,868,206 145,868,206 through profit or loss - - - - - 2,527,253,227 through profit or loss - - - - - 2,527,253,227 gh other comprehensive income - - - - - - 2,527,253,227 thent securities measured at amortised cost - - - - - - - - - - - - - - - - - - -	Cash on hand in foreign currency	ı	1	ı		113,367,726	113,367,726	113,367,726
s with banks and other and other and other and other and other banks and other management at fair halves by an advantagement at fair value by a bank banks by a bank banks by a bank banks by a bank banks by a bank bank by a bank bank bank by a bank bank bank bank bank bank bank ba	Gold	7,230,140,962	1	1	-	-	7,230,140,962	7,230,140,962
r management at fair 367,833,190 - - - - 367,833,190 nents - - 145,868,206 145,868,206 145,868,206 145,868,206 uned at fair value veincome uned at amortised cost - - 2,507,727,077 19,526,150 - 985,792,527 uned at amortised cost - - - 985,792,527 985,792,527 uned at amortised cost - - - 985,792,527 985,792,527 nred at amortised cost - - - 985,792,527 985,792,527 nred at amortised cost - - - 985,792,527 985,792,527 nred at amortised cost - - - 985,792,527 985,792,527 nred at amortised cost - - - - 985,792,527 985,792,527 nred at amortised cost - - - - - 985,792,527 985,792,527	Placements and loans with banks and other financial institutions	1	370,283,443	I	I	2,199,808,063	2,570,091,506	2,570,091,506
- - - - 145,868,206 145,868,206 145,868,206 145,868,206 145,868,206 145,868,206 145,868,206 145,868,206 145,868,206 145,868,206 145,868,206 145,868,206 145,868,206 145,868,206 145,868,206 145,868,206 145,868,206 145,868,206 145,207,033,480 145,20	Financial instruments under management at fair value through profit or loss	-	367,833,190	-	I	-	367,833,190	367,833,190
value – 2,507,727,077 19,526,150 – 2,527,253,227 nortised cost – – 985,792,527 985,792,527 – – – 985,792,527 985,792,527 – – – 985,792,527 266,686,136 – – – 266,686,136 266,686,136 7,230,140,962 738,116,633 2,507,727,077 19,526,150 3,711,522,658 14,207,033,480	Reverse repurchase agreements	ı	ı	l	l	145,868,206	145,868,206	146,683,539
measured at amortised cost - - - 985,792,527 985,792,527 - - - - 266,686,136 266,686,136 7,230,140,962 738,116,633 2,507,727,077 19,526,150 3,711,522,658 14,207,033,480	Investment securities measured at fair value through other comprehensive income	1	1	2,507,727,077	19,526,150	1	2,527,253,227	2,527,253,227
- - - 266,686,136 266,686,136 7,230,140,962 738,116,633 2,507,727,077 19,526,150 3,711,522,658 14,207,033,480	Investment securities measured at amortised cost	ı	ı	ı	ı	985,792,527	985,792,527	946,757,595
738,116,633 2,507,727,077 19,526,150 3,711,522,658 14,207,033,480	Other financial assets	I	1	1		266,686,136	266,686,136	266,686,136
		7,230,140,962	738,116,633	2,507,727,077	19,526,150	3,711,522,658	14,207,033,480	14,168,813,881

Accounting classifications and fair values, continued

KZT'000	Measured at FVTPL	Other at amortised cost	Total carrying amount	Fair value
LIABILITIES				
Currency in circulation	_	2,688,747,786	2,688,747,786	2,688,747,786
Deposits and balances from banks and other financial institutions	_	4,370,327,018	4,370,327,018	4,370,327,018
Financial instruments under management at fair value through profit or loss	934,215	_	934,215	934,215
Repurchase agreements	_	27,941,316	27,941,316	27,284,433
Current accounts of the National Fund of the Republic of Kazakhstan	_	724,730,007	724,730,007	724,730,007
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	_	397,535,424	397,535,424	397,535,424
Customer accounts	-	182,887,423	182,887,423	182,887,423
Debt securities issued	_	3,618,820,899	3,618,820,899	3,628,200,507
Estimated liabilities	-	33,162,428	33,162,428	33,162,428
Other financial liabilities	-	17,545,416	17,545,416	17,545,416
	934,215	12,061,697,717	12,062,631,932	12,071,354,657

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 ordinary 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.

Accounting classifications and fair values, continued

As at 31 December 2020 and 2019 fair value of investments in hedge funds and private equity 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 value of KZT 750,000,000 thousand (2019: KZT 750,000,000 thousand) cannot be determined.

Fair value of swap deals was not determined as they were accounted for not as derivatives but as "deposits and balances with banks and other financial institutions" and "deposits and balances from banks and other financial institutions" (Notes 19 and 27) and were measured at their nominal value in accordance with the Basis of Preparation (Note 2).

As at 31 December 2020 there were no asset and liability parts of swap deals (31 December 2019: KZT 10,669,586 thousand and KZT 15,099,183 thousand, respectively).

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: guoted market price (unadjusted) in an active market for an identical instrument.
- ▶ Level 2: inputs other than quotes prices included within 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 data.
- ▶ 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 2020 and 31 December 2019, 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 2020 '000 KZT	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

Fair value hierarchy, continued

31 December 2019 KZT'000	Level 1	Level 2	Level 3	Total
Gold	7,230,140,962	_	_	7,230,140,962
Placements and loans with banks and other financial institutions	_	370,283,443	_	370,283,443
Financial instruments under management at fair value through profit or loss				
– Derivative assets	692,865	749,310	_	1,442,175
– Equity investments	_	132,364,075	234,026,940	366,391,015
– Derivative liabilities	(755,824)	(178,391)	_	(934,215)
Investment securities measured at fair value through other comprehensive income		•	•	
– Debt and other fixed-income instruments	1,914,252,542	593,474,535	_	2,507,727,077
– Equity investments	19,526,150	-	_	19,526,150
	9,163,856,695	1,096,692,972	234,026,940	10,494,576,607

The table below analyses financial instruments categorised to Level 3 in the fair value hierarchy as at 31 December 2020 and 31 December 2019.

	2020 KZT'000	2019 KZT'000
Fair value at the beginning of the year	234,026,940	120,839,180
Deposits	132,399,917	105,054,608
Payments	(27,069,972)	(10,460,972)
Gain recognised through profit or loss	85,828,787	19,155,658
Revaluation reserve for foreign currency	28,040,115	(561,534)
Fair value at the end of the year	453,225,787	234,026,940

The National Bank's investments in equity investments, which are under management of NIC NBK JSC, categorised as 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 the 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 cost of real estate (real estate funds). To consolidate the fair value of the National Bank's holdings in these investment funds as at 31 December 2020 and 31 December 2019, 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.

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 2020 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 4,532,258 thousand (31 December: KZT 2,340,269 thousand).

Fair value hierarchy, continued

The following table analyses the fair value of financial instruments not measured at fair value, by levels of the fair value hierarchy into which each fair value measurement is categorised as at 31 December 2020:

KZT'000	Level 1	Level 2	Total fair values	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	_	4,338,690,000	4,338,690,000	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

Fair value hierarchy, continued

The following table analyses the fair value of financial instruments not measured at fair value, by the level in the fair value hierarchy into which each fair value measurement is categorised as at 31 December 2019:

KZT'000	Level 1	Level 2	Total fair values	Total carrying amount
ASSETS				
Cash on hand in foreign currency	_	113,367,726	113,367,726	113,367,726
Placements and loans with banks and other financial institutions	_	2,199,808,063	2,199,808,063	2,199,808,063
Reverse repurchase agreements	_	146,683,539	146,683,539	145,868,206
Investment securities measured at amortised cost	237,082,002	709,675,593	946,757,595	985,792,527
Other financial assets	_	266,686,136	266,686,136	266,686,136
LIABILITIES				
Currency in circulation	_	2,688,747,786	2,688,747,786	2,688,747,786
Deposits and balances from banks and other financial institutions	_	4,370,327,018	4,370,327,018	4,370,327,018
Repurchase agreements	_	27,284,433	27,284,433	27,941,316
Current accounts of the National Fund of the Republic of Kazakhstan	_	724,730,007	724,730,007	724,730,007
Current accounts of the Ministry of Finance of the Republic of Kazakhstan	_	397,535,424	397,535,424	397,535,424
Customer accounts	_	182,887,423	182,887,423	182,887,423
Debt securities issued	-	3,628,200,507	3,628,200,507	3,618,820,899
Estimated liabilities	_	33,162,428	33,162,428	33,162,428
Other financial liabilities	_	17,545,416	17,545,416	17,545,416

