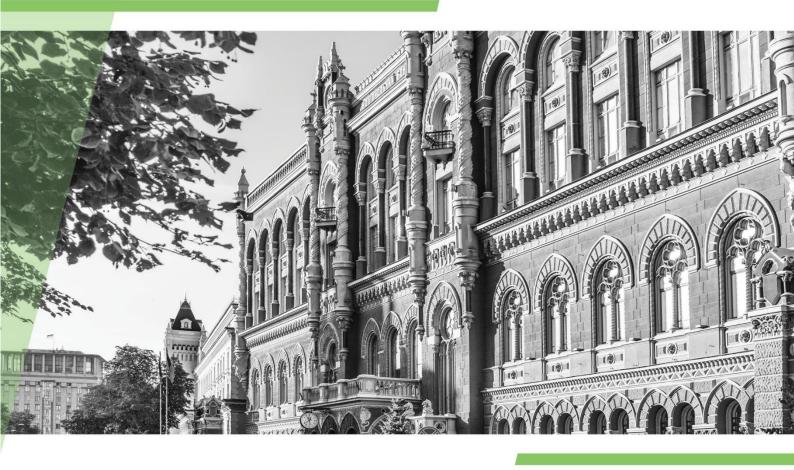


# Consolidated Financial Statements and Consolidated Management Report

for the Year Ended 31 December 2020





# Consolidated Management Report for the Year Ended 31 December 2020



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# Part 1. Nature of Operations

# 1.1. General Information about the National Bank of Ukraine

The National Bank of Ukraine (the NBU) is Ukraine's central bank. Its operations are governed by Ukraine's Constitution, Ukraine's Law *On the National Bank of Ukraine*, as well as other Ukrainian laws.

The central bank's main statutory function is safeguarding the stability of the Ukrainian unit of money. In performing its main function, the NBU must be guided by the priority of achieving and maintaining price stability in the country.

As of 31 December 2020 and 2019, the NBU's structure comprised the Head Office and the Banknote Printing and Minting Works, the central bank's standalone unit. These units operate within the scope of the NBU's tasks and functions, as defined by Ukraine's Law *On the National Bank of Ukraine*.

The NBU's subsidiary is the SETTLEMENT CENTER FOR SERVICING FINANCIAL MARKET AGREEMENTS PJSC (the Settlement Center).

The Settlement Center is the only institution that has a mandate to settle the cash leg of securities and other financial instrument agreements entered into on the stock exchange or in over-the-counter agreements, where the delivery versus payment principle is used. The Settlement Center opens and maintains money accounts for stock market practitioners. The Settlement Center is also responsible for paying securities-related income and the face value of redeemed securities to their holders, as well as for making payments related to other corporate operations, including those related to securities that have been placed and are transferred outside Ukraine.

As of 31 December 2020 and 2019, the NBU had investments in the National Depositary of Ukraine PJSC (the National Depository of Ukraine).

More detailed information about the NBU's functions, operational purpose and the participating interest in its subsidiary and associated companies is provided in Note 1 to the Consolidated financial statements for the year ended 31 December 2020 (hereinafter - Consolidated Financial Statements).

#### Scheme 1. Model of NBU activities

Suppliers	Resources	Processes	Products	Clients			
<ul> <li>public authorities of Ukraine</li> <li>international partners</li> <li>central banks of other countries</li> <li>foreign banks- counterparties</li> <li>Ukrainian banks- counterparties</li> <li>legal entities- suppliers of goods, works, services</li> <li>individuals- suppliers of goods, works, services</li> </ul>	<ul> <li>financial</li> <li>human</li> <li>production</li> <li>intellectual</li> <li>social and reputational</li> <li>natural</li> </ul>	Main:         • Currency regulation         • Regulation and development of payment market, operation of its infrastructure         • Management of accounts of clients and conducting external settlements         • System of statistical data management         • Promoting Financial Stability         • Determining monetary policy         • Implementing monetary policy         • Refinancing of banks and loans to the Deposit Guarantee Fund         • Depository recordkeeping         • Management of the official foreign exchange reserves         • Registration issues and licensing         • Supervision of banks' activities, nonbank financial institutions, oversight of financial market infrastructures         • Consumer rights protection for financial services         • Consumer rights protection for financial services         • Consumer rights management         • NBU's corporate governance         • Corporate rights management, participation in the management of other organizations         • NBU's corporate governance         • NBU's business continuity management         • Financial controlling         • Strategic development and change management         • Financial controlling         • Operation support to the NBU         • Accounting, taxes and reporting         • International cooperation         • Nonoperforming exp	<ul> <li>key policy rate and other monetary tools</li> <li>liquidity assistance mechanisms</li> <li>infrastructural solutions, infrastructure for settlements</li> <li>hryvnia cash</li> <li>methodology, rules for the use of financial instruments</li> <li>regulatory proposals, explanations</li> <li>supervision</li> <li>currency regulation</li> <li>financial monitoring</li> <li>analytical reports, discussion platforms</li> <li>consumer rights protection for financial services</li> <li>programs to raise financial literacy</li> <li>ensuring cyber resilience of the financial system</li> </ul>	<ul> <li>experts</li> <li>policy makers in charge of economic and financial policy</li> <li>financial entities</li> <li>economic entities</li> <li>state as a services provider</li> <li>Ukrainian citizens</li> </ul>			
		<ul> <li>Interest expenses</li> <li>Fee and commission expense</li> <li>Administrative expenses and personnel costs</li> <li>Other expenses</li> </ul>		<ul> <li>Interest income and expenses</li> <li>Fee and commission income</li> <li>Other income</li> </ul>			
Profit from NBU's ac	tivity						
<ul> <li>Results from transactions with financial assets and liabilities in foreign currency and monetary gold</li> <li>Results from transactions with financial instruments measured at fair value with the recognition of revaluation result in profit or loss</li> </ul>							
NBU's profit							

# 1.2. NBU Management

#### 1.2.1. NBU Council

Under the Ukrainian Constitution, the main tasks of the NBU Council include developing Monetary Policy Guidelines, monitoring the conduct of monetary policy. In addition, Ukraine's Law On the National Bank of Ukraine gives the council the mandate to approve the central bank's budget of administrative expenses for the next year, and to make decisions regarding the use of its profit for distribution to augment the central bank's authorized capital. The council also has the right to take a decision to increase the regulator's authorized capital; to approve its financial statements and reports on the central bank's administrative expense budget and the distribution of profits for distribution; to approve NBU Board decisions on the central bank's participation in international financial institutions; to oversee the NBU's internal contols; and to perform other functions within its powers, as set forth in applicable Ukrainian laws.

Four NBU Council members are appointed by Parliament, with four other members being appointed by the President.

The NBU Governor, who is appointed by the Ukrainian parliament on the recommendation of the Ukrainian president, is a member of the Council by virtue of their position.

Sitting Council members that have been appointed by parliament:

Viktor Koziuk Olena Scherbakova Vitaliy Shapran Vasyl Horbal– appointed on 16 September 2020 Sitting Council members that have been appointed by the Ukrainian president:

Bohdan Danylyshyn (was elected head of the council on 14 November 2019) Vasyl Furman Mykola Kalenskyi Oleksandr Petryk

**Kyrylo Shevchenko**, NBU Governor is a **council member** by virtue of his position – appointed on 16 July 2020

#### 1.2.2. NBU Board

The NBU Board is responsible for managing the central bank's activities, conducting monetary policy, and performing other functions, as set forth in Ukraine's Law *On the National Bank of Ukraine*.

The NBU Board consists of six members: the NBU Governor, the First Deputy Governor, and four Deputy Governors. The NBU Governor is appointed by the Ukrainian parliament at the suggestion of the Ukrainian President, and has a tenure of seven years. All NBU Deputy Governors are appointed and dismissed by the NBU Council at the suggestion of the NBU Governor. NBU Board decisions are taken on the principle of collegiality by a simple majority vote, with the Governor having the deciding vote.

#### **NBU Board**

**Kyrylo Shevchenko**, appointed as NBU Governor on 16 July 2020.

**Kateryna Rozhkova,** NBU First Deputy Governor Areas under her management include finance, management of property and procurement for the NBU, nonperforming assets management, Corporate Pension Fund operation, accounting and operations.

**Yaroslav Matuzka**, appointed as NBU Deputy Governor on 4 September 2020. Yaroslav Matuzka is responsible for prudential supervision, in particular banking supervision, registration and licensing, and financial monitoring of the banking system and nonbank financial services markets.

**Dmytro Sologub**, Deputy Governor of the NBU. Dmytro Sologub oversees monetary policy, macroprudential policy to ensure financial stability, economic analysis, the collection and analysis of statistics and reporting, central bank research, nonbank financial serveces regulation framework, and development of international relations.

**Oleksii Shaban**, appointed as NBU Deputy Governor on 7 August 2020. His area of responsibility comprises issues of payments and cash circulation, regulation of cashless payments and payment systems, development of innovative information technologies and infrastracture, as well as strategic review, drafting NBU strategy, strategy programs and plans of development of the NBU and the financial sector.

**Yuriy Heletiy,** appointed as NBU Deputy Governor on 23 July 2020. Yurii Heletiy oversees open market operations, FX regulation, bank regulation methodology, NBU Depository, NBU foreign exchange and gold reserves management.

More detailed information about the NBU Council and the NBU Board is available on the NBU's official website at <a href="https://bank.gov.ua/en/about">https://bank.gov.ua/en/about</a>

# 1.3. Organizational Structure. Organizational Changes at the NBU in 2020

More detailed information about the NBU's organization chart is available on the NBU official website at <u>https://bank.gov.ua/en/about/structure</u>.

The following changes occurred in the NBU's structure in 2020:

- for the National Bank of Ukraine to perform its functions in state regulation and supervision of nonbank financial services markets:
- Nonbank Financial Institutions Regulation Methodology Department was established to draw up proposals to Ukrainian laws on regulation and supervision of nonbank financial institutions and draft NBU regulations on regulation and supervision of nonbank financial institutions in line with the Ukrainian laws
- Nonbank Financial Services Supervision Department was established to supervise the markets of nonbank financial services in line with the Ukrainian laws
- Onsite Bank Inspection Department was reorganized into Onsite Inspection Department
- Methodology Department was reorganized into Banks Regulation Methodology Department
- Anti-Corruption Division was established. The purpose of the Division is to comply with requirements of the Law of Ukraine On Corruption Prevention and provisions of National Agency on Corruption Prevention.

- to optimize the structure of the National Bank of Ukraine, to distribute functions among its units, to separate functions of collateral appraisal on the loans and issuance of loans to banks:
- Financial and Operational Risks Office was excluded from the structure and on its basis Risk Management Department was established. The Department was delegated all functions of Financial and Operational Risks Office, as well as functions of appraisal and supervision of collateral, performed by Credit Support Department
- Credit Support Department was excluded from the structure and on its basis Credit Analysis and Liquidity Support Department was established. The department was delegated all the functions of Credit Support Department, except for functions of appraisal and supervision of collateral, delegated to the Risk Management Department.

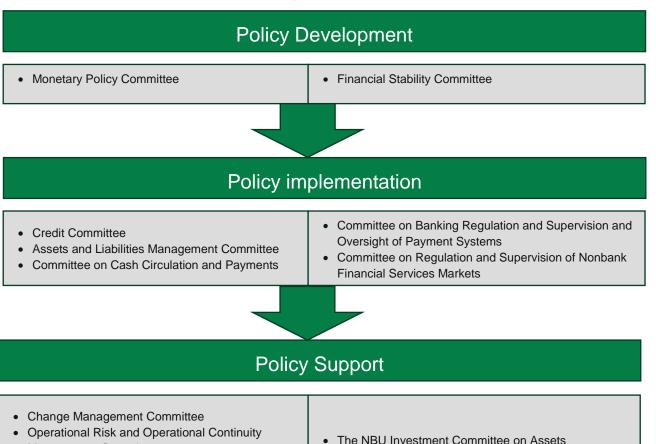
During 2020 from the structure of the National Bank of Ukraine were excluded:

 Analytics and SupTech Department — due to the redistribution of functions among structural units of the National Bank of Ukraine. Functions of the Department were distributed among other structural units of the National Bank of Ukraine.

# 1.4. Structure and Composition of Management Bodies

At present, the NBU Board has fourteen special committees. The structure of the committees covers all key activities of the NBU that require collective decisions. The committees fall into three main groups shown in Scheme 2.

#### Scheme 2. Structure and composition of corporate governance bodies



- Management CommitteeBudget Committee
- Budget Committee
- Tender Committee
- Committee for Strategic Planning of the NBU Banknote Printing and Minting Works Activities
- The NBU Investment Committee on Assets
   Management of the Corporate Nonstate Pension Fund
- Oversight Committee of the Ukrainian OverNight Index Average

#### Mandate of NBU Board Committees

**Monetary Policy Committee.** An advisory body established to facilitate the exchange of information and opinions regarding the development and implementation of monetary policy. The main tasks of the Committee are:

- developing principles and implementing monetary policy
- setting monetary policy objectives and benchmarks
- applying monetary policy instruments.

**Financial Stability Committee.** A consultative and advisory collegial body that develops proposals and recommendations for the formulation of principles and implementation of macroprudential policy to ensure financial stability. The main tasks of the Committee are:

- identifying potential systemic risks threatening the financial stability, and preparing proposals on minimizing their adverse impact
- developing recommendations on use of macroprudential policy, their alignment with measures of monetary and macroprudential policy, and monitoring of their implementation.

**Credit Committee.** A consultative and advisory collegial body the main tasks of which are:

- formulation and submission to the NBU Board of recommendations on granting loans to banks to support their liquidity
- provisioning (release) and use of provisions to cover financial risks
- debt workout of the banks classified as insolvent under loans issued by the NBU

 definition of methodology and management of credit risk assessment under NBU's transactions

Assets and Liabilities Management Committee. A collegial body mandated by the NBU Board to make decisions concerning the management of assets and liabilities, including Ukraine's gold and foreign exchange (international) reserves, to monitor risks, and to deliver financial results on operations with the NBU's assets and liabilities. The main tasks of the Committee are:

- formulation and implementation of the policy of efficient assets and liabilities management, including international reserves
- definition and implementation of the NBU investment strategy under transactions on international reserves allocation
- definition of actions on open markets
- definition and implementation of policy of management of the international reserves financial risks and the NBU market risks
- monitoring of market risks and financial performance under transactions with the NBU assets and liabilities.

**Committee on Banking Regulation and Supervision and Oversight of Payment Systems.** A collegial body mandated by the NBU Board Special authorities on banking regulation and supervision, currency supervision, state regulation and supervision of financial monitoring, and oversight of payment systems. The main tasks of the Committee are:

- ensuring stability and reliability of the Ukrainian banking system and protection of interests of banks' depositors and other creditors
- solving priority issues of supervision over banks, their standalone units and branches of foreign banks, and activities of the Ukrainian banking sector
- defining trends of the banking system development
- application of corrective measures for violation of banking, currency legislation, laws on financial monitoring, payment systems and funds transfer, NBU regulations and requirements therein
- application of corrective measures for violation of the laws of Ukraine on payment systems and funds transfer, NBU regulations
- registration and licensing of banks, accreditation of branches, representative offices of foreign bank in the territory of Ukraine, and registration of payment systems.

**Committee on Cash Circulation and Payments.** A consultative and advisory collegial body the main task of which is to elaborate the systemic approach to definition of policy, rules and regulation of cash circulation with synchronization of cash and cashless circulation specifics. The Committee reviews the issues and makes recommendatory decisions on:

- strategic development of cash circulation
- organization of cash circulation and cash settlements

- organization of production of Ukrainian banknotes, coins, commemorative and investment coins, souvenir products
- strategic development of cashless settlements, oversight of payment infrastructure, activities of payment systems and funds transfer, issues related to introduction of innovative payment instruments.

**Change Management Committee.** A collegial advisory body of the NBU Board established to centrally manage project activities at the NBU, with the purposes of implementing changes to build a modern, institutionally capable central bank and financial sector, including the Ukrainian banking system. The main tasks of the Committee are:

- centralized management of project activities at the NBU, reviewing materials and proposals for initiation and implementation of changes at the NBU
- approval of the strategy programs and development plans of the NBU and the financial sector.

**Budget Committee.** A consultative and advisory collegial body the main tasks of which are:

- promoting formation and implementation of the NBU policy aimed at enhancing the efficiency of its financial resources management
- ensuring implementation of the budgeting process and its integration with the strategy planning process
- promoting implementation of the NBU cost management process.

**Operational Risk and Operational Continuity Management Committee.** The committee is a standing collective advisory body established to support and optimize the system of operational risk management and to implement and develop the culture of operational risk management at the NBU. The main tasks of the Committee are:

- definition of the policy of operational risks management, NBU business continuity and internal control policy
- general monitoring and control of the NBU operational risks
- definition of policy for operational risk insurance and outsorcing.

**Tender Committee.** A collegial body responsible for organizing and conducting procurements. The committee carries out the selection of procurement procedures and their application, and ensures equal conditions for all participants, a fair and unbiased selection of winners.

**Committee for Strategic Planning of the NBU Banknote Printing and Minting Works Activities.** A collegial advisory body to the NBU Board specially established for strategic planning of the activities of the NBU Banknote Printing and Minting Works to ensure qualitative and effective changes in its operations.

In 2020, the following committees were established:

**Committee on Regulation and Supervision of Nonbank Financial Services Markets.** A collegial body to which the NBU Board delegated special authorities on supervision over nonbank financial services market participants and regulation of activities in the markets of nonbank financial services, in the sphere of protection of consumer rights in financial services, currency supervision, state regulation and supervision in financial monitoring. The main tasks of the Committee are:

- ensuring stability and reliability of nonbank financial services markets of Ukraine, and protection of consumer rights in financial services provided by the participants of nonbank financial services markets
- solving issues of supervision and regulation of the Ukrainian markets of nonbank financial services
- defining development trends of nonbank financial services markets and submission of respective proposals to the NBU Board
- applying corrective measures/penalties for violation by legal entities/individuals providing financial and other services (transactions) related to provision of financial services, except for banks and subjects of supervision (oversight), nonbank financial groups of legislation on financial services, protection of consumer rights in financial services, currency legislation, laws on financial monitoring, on applying special personal economic and other restrictive measures (sanctions), the NBU regulations
- ensuring exercising of the NBU functions in the area of registration and licensing of participants of the financial services markets, protection of consumer rights in financial services.

**Oversight Committee of the Ukrainian OverNight Index Average.** An advisory body established to share information and opinions on definition, calculation, and publication of the Ukrainian Money Market and Forex indicators the oversight of which is performed by the NBU.

The NBU Investment Committee on Assets Management of the Corporate Nonstate Pension Fund. A consultative and advisory collegial body of the NBU the main task of which is to improve efficiency of the Fund's assets management by reviewing and approving proposals and recommendations on issues related to implementing the NBU's activities on assets

# 1.5. Process and Project Management

#### **Developing Process Management**

The NBU applies a systemic approach to process management. This approach aims to improve the NBU's operations and to enhance the quality and effectiveness of its processes.

The NBU Board sets out a comprehensive vision of process management through implementing its concept for process management system development. management of the NBU's Corporate Nonstate Pension Fund.

The professionalism of the NBU's committees helps to ensure the transparency of the NBU's activities, strengthens the effectiveness of the NBU Board, and distributes the workload among the Board and the committees.

#### Mandates of the NBU Council committees

The **Audit Committee** is an advisory body of the NBU Council established in accordance with statutory requirements. Its main tasks are: preparing and submitting for consideration of the NBU Council of materials within the authorities of the NBU Council regarding assessment of reliability and efficiency of the internal control system in the NBU, completeness and accuracy of its annual financial statements, supervision over activities of the internal audit unit, decision-making on capital management and other financial issues within the Council authorities.

Monetary Policy and Financial Stability Committee of the NBU Council is the NBU Council body acting to ensure the implementation of the Council's authorities according to the Constitution of Ukraine. Law of Ukraine *On the National Bank of Ukraine* and other laws. In particular, its main tasks are: developing and submitting for consideration of the Council of draft decisions and other materials on drafting Monetary Guidelines, exercising control over monetary policy implementation, performing analysis of the Ukrainian monetary police influence on social and economic development of Ukraine, assessing activities of the NBU Board regarding implementation of the Monetary Guidelines.

**Committee on Rules of Procedure, Remunerations and Appointments to Positions** is a consultative body of the NBU Council responsible for:

- developing draft decisions and respective materials for appointment to position and dismissal of the NBU Deputy Governors and the Head of the internal audit service
- approving the methods of remuneration determination for the Governor of the NBU and his/her deputies, and the methods to determine remuneration to the NBU Council members.

In order to identify all of its processes, the NBU created a process register. This register, which categorizes processes according to three levels, is based on a hierarchical model, in which higher level processes are broken down into lower level ones:

- first level processes are the central bank's area of activity
- second level processes determine the internal content of the central bank's areas or types of activities, as outlined

in first level processes, and are grouped using the criterion of common goals and methods for creating value for internal or external clients

 third level processes comprise a limited set of interconnected operations performed by one or more process participants to achieve a specific result.

In 2020, the process register was amended to encompass new processes based on the widened mandate of the NBU in line with the Law of Ukraine No. 79–IX *On Amending Some Laws That Improve State Regulation of Financial Services Markets*, dated 12 September 2019 (hereinafter – the SPLIT).

As of 31 December 2020, the NBU had 30 first level processes, 203 second level processes, and 889 third level ones.

With a view to efficient process management, the 2020-2021 Process Management Framework provided for merger of processes to aim at the result, considering the value proposal.

Consequently, by 1 March 2021, the NBU had 18 first level processes, 117 second level processes, and 146 third level ones.

The effects of reducing the number of process include improvement of the NBU governance, higher operating efficiency through avoiding overlaps in the processes of different units, and higher efficiency of the internal control system.

The NBU applies a quantity measurement approach to the assessment of process performance. The system of process indicators is built on the principles of measurability, reliability, transparency, and visualization. Key performance indicators (KPI) as well as service level agreements (SLA) on the processes are used to carry out assessment, monitoring, and control.

The NBU implements initiatives aimed at streamlining its processes within the framework of its operation activities. In 2020, a part of initiatives were completed and the initiatives in progress were reviewed to check their topicality and relation to the current projects. By the end of 2020, the NBU had ten initiatives in progress to be completed in 2021.

#### **Developing Project Management**

The NBU continued enhancing the effectiveness of project implementation, both for the NBU's internal transformation projects and financial sector development projects. The NBU's Project Office was improving and streamlining its project management methodology and tools.

In 2020, a number of new instruments and approaches were introduced to enhance involvement in projects, arrange promptly monitoring and improve managemetn quality.

In particular, the NBU has launched and tested the automated project management system based on Atlassian products: Jira Software and Confluence Software. The new system allows more accurate project planning and progress control, as well as strengthens resource management and prompt monitoring of project statuses.

Key performance indicators under projects were implemented in the system of the employees' goals and tasks planning and assessment. Each quarter, project managers and officers carefully plan tasks for the next quarter and assess performance for the previous one. This approach has evolved from the resource planning by project phases, which was introduced earlier. It allows more thoughtful planning and assessment of the project objective and resources.

The central bank established a steering committee in order to manage the program more promptly (Program/project leading team, PLT). Previously, PLT meetings were held to discuss project programs, today they cover the whole projects portfolio. PLT comprises key participants in the projects and is headed by the projects sponsor. The meetings are held monthly. This makes it possible to respond more quickly to challenges and unresolved issues related to the implementation of the projects, while also making it easier for project participants to interact with each other.

The NBU is also constantly involved in efforts to increase the level of knowledge of its project managers. In 2020, it established the PM Club training program. Every two or three months trainings are given on the topics of Project Management Body of Knowledge. Three blocks of advanced project management cources were provided. The PM Club involves staff from business units who implement projects at the central bank. Employees who are not PM Club members, but wish to study project management or plan to become project managers can benefit from a distant learning course on basics of project management.

### 1.6. Impact of Economic Conditions on the NBU's Financial Position and Performance

#### **Economic Developments**

#### Real GDP fell by 4.0% yoy in 2020 (http://ukrstat.gov.ua).

In 2020, the main reason behind the decline in GDP was the quarantine introduced in Ukraine and worldwide in response to the spread of COVID-19. This caused a deep recession in

those sectors which were practically closed due to quarantine restrictions (mainly the services sector – in particular, tourism, entertainment, trade, and transportation). The decline was the most profound in Q2 2020. An additional negative contribution came from a decrease in agricultural production driven by a smaller harvest of main crops as yields were affected by dry weather. The labor market conditions

were also complicated with a sharp rise in unemployment accompanied by decreasing household income, which was only partially offset by the government's social support programs.

As a reminder, strict quarantine measures were imposed in Ukraine from 16 March to 21 May 2020, which included the following:

- a ban on visiting educational institutions
- limited public transportation in and between cities and limited air transportation
- lockdown of restaurants (except delivery) and culture and entertainment centers
- lockdown of retail outlets, except groceries, fueling stations, and pharmacies.

Later on, starting 22 May 2020, the adaptive quarantine was introduced with its stringency depending on the number of disease cases in individual regions. In addition, the "weekend quarantine" was imposed in November 2020 limiting operations of businesses engaged in retail trading and providing services.

After the strict lockdown ended, the Ukrainian economy recovered quickly in H2. The majority of businesses in the most affected sector – services – resumed their normal operations. The tightening of quarantine measures in November had a limited impact on business activity.

The rapid economic recovery in H2 was mainly driven by growth in consumption. Increased wages and social spending from the budget bolstered high consumer demand. Unemployment also started to ebb. The NBU's and the government's stimulus measures supported business activity. Increased budget spending on road infrastructure, medicine, and defense boosted performance in a number of sectors, such as construction, public administration, defense, and healthcare. On the other hand, businesses' investment activity remained sluggish due to uncertainty caused by the pandemic.

The consolidated budget recorded a large deficit in 2020 (almost UAH 224 billion), produced by budgets of all levels. The temporary large negative balance was well-justified to support the economy during the crisis, thanks to the fiscal space created in previous years. The deficit was financed mainly with debt, both domestic and foreign. Coupled with foreign exchange revaluation caused by weakening of the

hryvnia, this made the public and publicly guaranteed debt increase compared to the start of the year. Moreover, issuing government securities to increase capital of one of the stateowned banks and providing government guarantees to support the development of road infrastructure and the electricity market were additional factors to the debt growth.

In 2020, the surplus of Ukraine's current account hit one of its record-high levels (USD 6.2 billion or 4.0% of GDP). It was due to a significant decrease in the deficit of merchandise trade and lower primary income payments. With foreign demand for food being high, exporters using opportunities provided by global markets, and global prices growing rapidly, exports remained stable, declining by only 2%. At the same time, imports of goods decreased by 14.2% on the back of lower energy prices and weaker domestic demand. There were outflows from the financial account as of the year-end (USD 4.2 billion) owing to large foreign debt repayments and capital flight from all emerging markets. However, it was fully offset by current account inflows. As a result, over the year gross international reserves reached USD 29.1 billion, which corresponds to 4.8 months of future imports.

Inflation was below the  $5\% \pm 1$  pp target range for most of 2020. Falling global energy prices coupled with declining demand for non-staple goods and services restrained price growth during the pandemic. Inflation accelerated late in the year, pushed by growing domestic consumer demand, high global commodity prices, and poorer harvests. As a result, inflation in December returned to the target range and reached its midpoint of 5.0%.

The NBU's monetary policy in 2020 was loose. In H1 2020, the central bank cut its key policy rate by 750 bp, to an alltime low of 6%. The rate decreased to almost zero in real terms. Since August, the key policy rate has been in negative terrain and far below its neutral level. Thus, despite the key policy rate being unchanged, monetary policy was accommodative in H2 2020, which supported the economy during the coronavirus crisis.

The banking system maintained a large liquidity surplus (which is defined as balances of banks' correspondent accounts and NBU certificates of deposit). The intraday liquidity surplus increased markedly in 2020, mainly a result of growth in intraday balances of certificates of deposit (the principal amount reached UAH 129.6 billion). Intraday balances of banks' correspondent accounts remained practically unchanged at UAH 55.6 billion.

# 1.7. Fallout from Global Covid-19 Pandemic

The Covid-19 pandemic has had a large-scale impact on global economies and all areas of life. In this situation, the NBU used its resources to the maximum in order to help the country.

The central bank focused its efforts on two important issues: minimizing the risks of infection spread among its employees and supporting the banking sector and the economy when restrictive measures were in place, including the strict lockdown, by approving a set of anti-crisis actions. This allowed reducing the regulatory burden on banks on the one hand, and taking care of the sectors and borrowers that were hit the hardest by the tight quarantine measures on the other.

First of all, the NBU immediately took measures to protect its employees. Office employees were moved to remote work. Those working in production facilities shifted to a special schedule, which differed depending on the specifics of their work. This allowed the NBU to ensure business continuity and reduce the economic fallout from the pandemic.

Employees who had to stay at their working places were provided with safety glasses, medical masks, and hand sanitizers.

NBU employees and their relatives (184 persons) received financial assistance for medical treatment of illnesses caused by Covid-19 and for making PCR tests to the total amount of UAH 248,774 (over August–December 2020).

The NBU took the following measures in order to prevent Covid-19 infection from being brought in and spread in its premises:

- created an emergency operations center based on NBU units in order to prevent Covid-19 infection from being brought in and spread in the NBU's premises
- arranged procurement of personal protective equipment (disinfectants and other necessary materials)
- organized thermometry of employees and visitors at the entrance to buildings
- optimized the program of public events (including business trips of NBU employees) in order to minimize the participation of NBU employees in these events as organizers or attendees (both in Ukraine and abroad)
- arranged premises for medical personnel at the sites of the NBU (in Kyiv)
- arranged additional transportation routes in Kyiv, Dnipro, Odesa, Lviv, Kharkiv, and Khmelnytskyi to transport employees to offices when public transport was closed in order to ensure proper functioning of business processes (around 26,000 employees were transported over the said period).

Throughout the period from the beginning of the quarantine to the end of 2020, the NBU purchased/used the following personal protective equipment and other devices:

Name	Unit of measurement	Quantity
Protective masks	units	396,275
Safety glasses	pair	794
Protective gloves	pair	47,200
Pyrometers	units	27
UV germicidal lamps	units	53
Door frames for disinfecting employees' clothes	units	14
Disinfectants for hands and surfaces	liters	2,579

#### Moving Employees to Remote Work

In 2020, the NBU provided its employees with the option to work remotely.

Over the period of remote work, 72% of employees have used this opportunity.

The NBU ran a pilot project of remote work, which should have lasted from 15 January 2020 to 15 March 2020. The introduction of the quarantine forced the NBU to promptly scale the remote work project to all its employees. Based on a survey of employees and the positive feedback of their supervisors on the effectiveness of remote work, the NBU Board in June 2020 permanently approved the remote work format for NBU employees for the duration of quarantine restrictions.

In order to provide NBU employees with the opportunity to work remotely during the quarantine imposed to fight the Covid-19 pandemic, the NBU purchased portative computers (laptops) and implemented the system to control connections to the NBU's information network along with the VPN functionality, which allowed NBU employees to work remotely during the quarantine and safely access the NBU's resources via the internet.

The NBU also launched Oracle Identity Management, a centralized system for managing user accounts, which allowed it to automatize the lifecycle processes of user accounts (creating and blocking accounts, changing passwords, granting access to information systems, etc.) and promptly move a large number of NBU employees to remote work during the quarantine.

The main issue of SEP operation in 2020 was to secure stable performance of interbank settlements amid the Covid-19 pandemic and considering its impact on the banking system. The NBU has ensured uninterrupted functioning of the SEP. Taking into account the government's decision to support the economy of Ukraine, the following changes were made to the SEP's tariff policy:

- charges for making payments via the SEP were cancelled for several months in Q2 and Q3 2020
- charges for transferring one-off financial aid to businesses via the SEP was cancelled pursuant to Resolution of the Cabinet of Ministers No. 1233 dated 9 December 2020.

### **Charity Projects**

In order to support Ukraine in counteracting the spread of the coronavirus, the NBU team in April 2020 launched a charity project to help Ukrainian medical institutions fight Covid-19. A working group of the NBU analyzed the primary needs of hospitals and decided on providing financial aid or purchasing necessary equipment. The money for this charity initiative were raised exclusively from employees' donations. Thanks to this charity initiative, in 2020 the NBU provided assistance to eight medical institutions to the total amount of UAH 617,000. In particular, the NBU helped Bila Tserkva City Hospital No. 3, Sarny Central District Hospital, Malyn City Hospital, Nadvirna District Hospital, Kyiv Oblast Cardiological Clinic, Kyiv-Sviatoshyn Central District Hospital, Kitsman Central District Hospital, and Volyn Oblast Infectious Diseases Hospital.

#### **Handling Cash**

In order to maintain national currency cash in proper condition and prevent the coronavirus from spreading, the NBU approved the Action Plan to Maintain Cash in Proper Condition and Prevent the Virus Spread among the NBU's Employees and Customers, which, among other things, envisages the following:

- storing cash accepted from banks in a separate vault during 14 days without opening the cash packs sealed by banks
- after the end of the observation period for cash accepted from banks, treating hryvnia banknotes using specialized high-speed machines in compliance with safety requirements and protection measures for cash desk employees
- additional treatment of cash center premises, vaults, and customer areas, and control over fulfillment of preventive measures.

As a preventive measure to fight the spread of the coronavirus, the NBU recommended banks to develop measures to maintain cash of both national and foreign currencies in proper condition and minimize the risks of potential coronavirus spread among banks' employees and customers.

# Part 2. Goals and Strategies

The NBU's mission is to deliver price and financial stability in order to promote sustainable economic growth in Ukraine.

NBU Vision: The NBU is a modern, open, and independent central bank, which enjoys public trust and is integrated into the European community of national central banks.

The NBU's strategic development plans are based on the analysis of major global and national trends, changes in customer needs, and the NBU's internal environment. The NBU makes these plans to achieve its goals.

The coronavirus pandemic has been a significant external factor that, along with the global economic crisis, has prompted governments to take unprecedented monetary and fiscal measures to stimulate their economies, mitigate the fallout from long-term lockdowns, and promote economic growth. Ukraine has also retained the IMF's political support, provided that the government implements new reforms and those initiated previously. The IMF's trust is an important signal for international investors and partners.

The drivers of economic development in the coming years will be digitalization and the development of artificial intelligence technologies, which will increase the demand for automation, robotics, ready-made fast technologies, integration services, and security solutions.

Social tensions in Ukrainian society that have been fueled by the pandemic and quarantine measures will affect confidence in government authorities and financial institutions, thus increasing inflationary expectations and demand for cash, and may negatively affect dedollarization processes.

Each of the NBU's client groups has its own needs, which are determined by the nature of their activities, areas of interest, the group's role in the financial environment, and current changes that each role undergoes when impacted by global and local trends. Major needs of the central bank's clients:

- access to information
- creating high-quality and effective market rules and regulatory instruments
- macroeconomic stability
- affordable loans, free capital flow
- economic development of Ukraine
- preserving the real value of income and savings
- convenient settlements

protection of consumer rights in financial services

Given these trends and customer needs, the NBU in the coming years will make efforts to promote the development of the financial sector and the economy, achieve a new level of digitalization, and increase its performance in financial and related services and its institutional development.

Regarding the development of the financial sector, the NBU in 2020 also approved the Strategy of Ukrainian Financial Sector Development until 2025, which will ensure further reform and development of the financial sector of Ukraine in line with leading international practices. The NBU will implement the measures stipulated in the EU-Ukraine Association Agreement and Ukraine's other international commitments. The strategy noted above replaced the Comprehensive Program of Ukrainian Financial Sector Development until 2020, which identified reform priorities for regulators over the past five years.

The Strategy outlines five major priorities of financial sector development:

- strengthening financial stability
- promoting macroeconomic development and economic growth
- developing financial markets
- expanding financial inclusion
- introducing innovations in the financial sector.

Approved and made public in the spring of 2018, the NBU's medium-term strategy is the first document to outline the central bank's goals for 2018–2020.

In 2020, the NBU was at the final stage of its first strategic cycle, which was based on the NBU's strategy for 2018–2020 with the following strategic goals:

- low and stable inflation
- a stable, transparent, and effective banking system
- resumption of lending
- efficient regulation of financial sector
- free flow of capital
- financial inclusion
- a modern, open, independent, and effective central bank.

# Part 3. Resources, Risks and Relations

### Resources

The NBU uses the following types of resources in order to create products/value proposition for its customers and attain the goals set forth in its mandate:

- financial
- human
- production
- intellectual
- social and reputational
- natural.

# 3.1. Financial Resources

Financial resources include available means which the NBU receives as financing or from transactions or investment and which it uses to fulfill its functions and provide services.

The NBU employs the following types of financial resources: debt and equity, namely paid-in capital and earned capital.

The NBU's debt includes funds the central bank raises from foreign and international organizations in order to implement its policy. These are

- loans received from foreign banks and organizations
- funds received from the IMF, including liabilities arising from quota contributions, SDR purchases (received loans), and SDR allocations.

Debt is shown in the NBU's consolidated statement of financial position as liabilities and gives rise to expenses recorded in the Consolidated Statement of Profit or Loss and other Comprehensive Income.

The paid-in capital refers to the statutory capital of UAH 100 million, which is owned by the state. A portion of the NBU's distributable profit and, if necessary, the state budget of Ukraine, are the sources of the central bank's authorized capital.

The earned capital consists of retained profit and provisions created from profits. The NBU raises:

- general reserves to cover its losses; these provisions are made annually by distributing a portion of the profits earned during the year
- revaluation reserves to cover unrealized costs from the revaluation of financial instruments, monetary gold, and investment metals.

The NBU's equity is presented in the respective section of the NBU's consolidated statement of financial position.

General reserves are created from a portion of the profits earned in the current year. Revaluation reserves are made by accumulating gains from financial instrument revaluations carried out during the year. These revaluations are presented in the NBU's Consolidated Statement of Profit or Loss and other Comprehensive Income.

For more details on the management of NBU capital, see Note 28 to the NBU's Consolidated Financial Statements.

#### 3.1.1. Distributable Profit Forecast

The NBU determines distributable profit in accordance with the Law of Ukraine *On the National Bank of Ukraine* and distributes it between the state budget and its equity, as set forth in the law. Therefore, forecasting distributable profit is important for assessing the central bank's future financial position and equity and for medium-term budget planning.

The NBU makes distributable profit forecasts. These forecasts include projections of the NBU's financial position (assets, liabilities and equity) and income and expenses, which in turn allows the central bank to forecast distributable profit and its distribution. The forecasts can cover the following periods:

- the medium term (i.e. three years) primarily for informing state authorities about projected transfers from the NBU to the budget
- the current year for obtaining more up-to-date information about the NBU's financial position and distributable profit as of the end of the year.

A macroeconomic forecast that is approved by the NBU Board as part of the monetary policy decision-making process is the basis for a distributable profit forecast. Macroeconomic forecasts contain information about the NBU's projections of the monetary base, international reserves and transactions with the reserves, the hryvnia exchange rate, the key policy rate, and the consumer price index. In addition, a forecast of open market operations provides inputs for a distributable profit forecast. These inputs include yields on foreign currency instruments, projected amounts of debt liabilities to the IMF, projected fee and commission and other income and expenses, including administrative expenses, projected repayments of past due debt on bank loans and making/reversing provisions for such loans, and so on. All inputs are integrated into a financial forecast model, which processes the inputs. What is more, a number of indicators are calculated in line with the algorithms set in the model. Expert assumptions are an important element of forecasting, as they allow for forecasting future indicators under conditions of uncertainty. Scenario modelling may also be used in order to construct various scenarios, depending on the variations in inputs and expert assumptions.

#### 3.1.2. Planning and Controlling Administrative Expenses

With a view to ensuring its operation, the NBU draws up an administrative budget for one year ahead; the NBU Council approves the budget by 15 November of the current year.

The administrative budget includes:

- staff costs
- administrative and other expenses
- depreciation and amortization
- provisioning on assets, and other provisioning
- investment in NBU activities.

Financial resources are planned to meet the needs of NBU subdivisions and the NBU Council for the year ahead and thus enable the NBU to fulfill its tasks and attain its strategic goals.

In line with the principles of transparency and efficiency of the NBU's expenses, control over the central bank's expenses is established by law:

- The NBU's expenses are disclosed in its annual financial statements in accordance with the Law of Ukraine On the National Bank of Ukraine.
- The financial statements are audited by an audit company selected through a procurement procedure in accordance with the Law of Ukraine On Public Procurement.
- The NBU Council, an independent body to which the NBU reports, approves the administrative budget, which includes the NBU's operating expenses, and controls the implementation of the budget during the year.
- Every year, the Accounting Chamber monitors the implementation of the NBU's administrative budget and its obligation to transfer funds to the state budget of Ukraine. The Accounting Chamber reports audit results

### 3.2. Human Resources

Human resources include employees of the NBU, their competencies, abilities, experience and motivation to fulfill the functions, provide the services, and attain the goals of the NBU.

In conducting its activities, the NBU uses human resources represented by its staff, namely:

 specialists who work to fulfill the NBU's central bank functions to the Ukrainian parliament, the Cabinet of Ministers, and the President of Ukraine.

Reports on the NBU's planned and actual expenses for the reporting period are submitted on a monthly basis to the Budget Committee and on a quarterly basis to the NBU Board and the NBU Council.

The approval and implementation of the NBU's administrative budget is controlled by the central bank's internal audit. The procurement procedure is public and competitive.

The NBU has a system of internal controls. The controls ensure that expenses are justified and economically sound and that goods, works, and services of proper quality are purchased at reasonable prices.

The NBU has a cost management system, which, among other things, serves to determine general expenses incurred by NBU units as they work on reaching the strategic goals, record and analyze the expenses, assess the efficiency of resource usage, and search for cost cutting opportunities.

One of the cost management tools used by the NBU is cost allocation, which the central bank implemented in 2019.

Cost allocation implies distributing expenses from the administrative budget of the NBU head office (excluding expenses on provisioning for financial asset impairment, providing security for potential liabilities, and other costs that are not subject to distribution) among three cost allocation targets: NBU structural units, level two processes, and the NBU's functions.

Cost allocation results are reflected in quarterly reports that contain information (data as of a certain date and historical data) about the costs of structural units, level two processes, and the NBU's functions. These reports are used to assess the efficiency of NBU units and level two processes as well as to find ways to optimize costs, and make decisions on the management of costs and NBU activities.

The NBU has established and maintains a corporate culture of resource saving by its units. In particular, the staff incentive system envisages a dependence of bonuses paid to heads of units on cost saving results.

 workers who are support staff carrying out maintenance functions (drivers, cleaners, catering staff, and so on).

Human resources do not appear in the NBU's consolidated statement of financial position, as this type of resources does not meet the recognition criteria – the NBU has no control. However, the Consolidated Statement of Profit or Loss and other Comprehensive Income reflects expenses on these resources: staff costs and other costs, provisions, and other expenses.

#### **HR Policy**

In 2020, the NBU continued to implement projects and meet goals within the framework of its HR strategy for 2018–2020. The strategy covers the key areas and main interactions of HR management, which primarily concern search, selection, appraisal, training, development, retention, and remuneration of the staff.

Among other things, the NBU, in good time, recruited skilled and motivated staff for its units. The central bank worked to implement Total Rewards (such as compensation, benefits, performance management, development, recognition and work-life balance). The NBU ensured that its brand is attractive to, and recognized by, its potential employees, while also enhancing the loyalty of its staff based on their value expectations. The NBU engaged in efforts to deliver the required conditions for staff development and training, and create an environment conducive to the development of a succession and leadership culture. The NBU also worked to improve its tools for planning and appraising the activities of employees and teams according to organizational, team and individual goals and business plans used to implement the central bank's strategy. The central bank also kept automated current records of staff and provided HR support to staffers, while also compiling HR statistics on the basis of data provided by the SAP for HCM human resource management system and other NBU information systems, and so on.

#### **Remuneration Policy**

The principles of, and approaches to, the management of the remuneration (pay) of NBU employees set out in the NBU's staff management policies and regulation on the remuneration (pay) of head office staff:

a) intend to create conditions and put in place tools that provide financial incentives for employees, maintain the required level of their involvement and satisfaction in order to

### 3.3. Production Resources

The NBU's production resources include manmade (rather than natural) physical assets that the central bank uses in the performance of its functions and services.

The NBU's production resources include:

- property and equipment (buildings, structures, vehicles, machinery, equipment, tools, appliances, gear, capital investments in property and equipment, etc.)
- investment property
- inventories of tangible assets
- other similar assets

Production resources are presented in the NBU's Consolidated Statement of Financial Position as assets. Production resources give rise to expenses that are deliver process continuity and efficiency, and to enable the central bank to achieve its strategic goals

b) implement and improve flexible approaches to incentivizing staff that take into account the individual needs of staffers and potential candidates, and ensure their satisfaction and motivation is at a sufficient level to effectively perform their functions and achieve goals

c) are based on position grading, which, among other things, serves to analyze the value of positions, processes and functions.

Remuneration policies include the following remuneration components for NBU employees:

- base pay (base component), which is the official salary set within the range for each position grade by the NBU Board
- a variable component, which is extra salary in the form of raises, bonuses, and premiums
- financial aid for the medical treatment of employees and their family members and for the burial of deceased NBU employees
- redundancy payments to those NBU employees that have been made redundant
- guarantee and compensation payments, as set forth in Ukrainian law
- other remunerations (contributions), such as the pension contributions the NBU makes for its employees to the NBU Corporate Non-State Pension Fund, insurance premiums for voluntary medical insurance agreements, contributions to the NBU primary trade union organization, and contributions related to cultural events and health improvement.

When deciding on the remuneration for its employees, the NBU is guided by labor market remuneration statistics.

recognized in the Consolidated Statement of Profit or Loss and other Comprehensive Income.

#### Management of State-Owned Real Assets

In accordance with the Law of Ukraine On the National Bank of Ukraine, the NBU's assets are owned by the state and are under the central bank's operating control.

The NBU manages the following assets:

- the central bank's own real assets
- real assets the NBU has acquired by recovering the property (collateral) pledged as security against refinancing loans.

To efficiently manage its real assets portfolio, the NBU disposes of noncore assets, takes a functionality-based approach to property disposal, and always uses effective methods of asset management on the case-by-case basis.

In 2019, the NBU adopted a Real Assets Management Strategy for 2019–2025, which identifies the main conceptual areas of the optimization and effective use of the NBU's real assets portfolio.

In 2020, the NBU rented out the real assets under its operating control to the following entities: state-owned Banking University, the Regional Office of the Deposit State Property Fund of Ukraine for the Kharkiv, Donetsk, and Luhansk oblasts (this tenant underwent a reorganization), the Regional Office of the Deposit State Property Fund of Ukraine for the Lviv, Zakarpattia and Volyn oblasts, the Second Administrative Court of Appeal, the Central And West Interregional Office of the Ministry of Justice (Khmelnytskyi), the West Interoblast Regional Office of the Antimonopoly Committee of Ukraine, Oschadbank JSC, VF Ukraine PJSC and others.

#### **Collateral management policy**

The NBU issues loans backed by securities, real estate, property rights under banks' loan agreements, deposit agreements, and other types of collateral.

### 3.4. Intellectual Resources

Intellectual resources include intangible, knowledge-based assets.

The NBU uses the following types of intellectual resources:

- intangible assets (software, both purchased and own, licenses, sites, information, databases, copyright, rights of enjoyment, etc.)
- organizational resources knowledge, research, and knowledge bases accumulated in the NBU, systems, processes, and procedures.

The NBU's intangible assets, recognized and presented in the Consolidated Statement of Financial Position as assets, primarily include third-party software and licenses to use software that eventually expire, resulting in expenses that are recognized in the Consolidated Statement of Profit or

# 3.5. Social and Reputational Resources

Social and reputational resources include institutions and relationships within communities, as well as between stakeholders and other groups, and the ability to share information to increase individual and collective wealth.

The NBU uses the following types of social and reputational resources:

For more information on types of collateral and the extent of coverage of loans issued to banks, refer to Note 10 of the NBU Consolidated Financial Statements.

In line with the loan agreement, the collateral is managed and stored by borrowers until enforcement is required to repay a debt to the bank – if borrowers fail to meet their liabilities under the loan agreement.

Nonperforming loans issued to banks are repaid using proceeds from the sale of collateral, as well as by the NBU's appropriation of collateral.

In accordance with the Law of Ukraine *On the National Bank* of *Ukraine*, the NBU acquires, in order to cover the debts of the NBU, any rights and assets, provided that they are further alienated within the shortest possible time. The central bank does not use these rights and assets for business purposes.

The NBU manages 53 purchased land plots measuring a total 200.6 hectares and 5 acquired real assets measuring a total 37,078.0 square meters (including the land plot of 0.5883 hectares under an aquired building).

Part 4 hereof describes how the NBU forecloses and aquires the assets of this type to recover outstanding loans.

Loss and other Comprehensive Income mainly as administrative and other expenses.

Software developed by the central bank itself, the NBU's official website, built by the NBU's software developers, databases, and the right to use state-owned land do not meet the criteria for being recognized as assets, and are thus not recognized in the Consolidated Statement of Financial Position. However, the NBU bears the costs of developing and maintaining these assets, and these costs are recognized in the Consolidated Statement of Profit or Loss and Other Comprehensive Income.

For more information on the development of research at the NBU, the modernization of reporting systems, the development of open data, IT, information security, and bank cyber security, see Part 4 hereof.

- the NBU values, the code of conduct for employees and the rules of conduct, including anti-corruption ones
- relationships with stakeholders
- reputation- and brand-related intangible assets
- social licenses to operate: NBU's rights to perform its main functions as set forth in the legislation.

The NBU's consolidated statement of financial position does not recognize social and reputational resources since they do not meet the criteria of financial statement items. However, the NBU incurs expenses for their development and maintenance. Therefore, such expenses are recorded mainly as administrative and other expenses in the Consolidated Statement of Profit or Loss and other Comprehensive Income.

#### Code of Conduct

The NBU Code of Conduct (hereinafter – the Code) was approved in 2016 to strengthen the NBU's institutional capacity.

The Code's provisions apply not only to employees but also to suppliers, consultants, trainees, and other persons cooperating with the NBU.

The Code together with the NBU values are the fundamental pillars of the NBU corporate culture, necessary to fulfill the mission and achieve the vision of the NBU.

The Code regulates the rules of conduct regarding:

- daily working relationships between employees
- compliance with the Constitution of Ukraine, Ukrainian laws and NBU regulations and administrative acts
- protection and preservation of NBU assets
- confidentiality of information
- environment protection and efficiency of use of natural resources
- prioritization of public and state interests
- responsibility for the employees' fulfillment of the tasks and goals
- interaction with public sector authorities, banks, and other financial institutions
- decision making, communication standards, interaction with the media
- behavior and interaction with other social network users, dissemination of information and its distortion
- conflict of interest, political activity, activities outside the NBU, combating corruption, and rules for accepting gifts, etc.

#### **Anti-corruption Policy**

The NBU's policy on preventing corruption bases on the principles of good faith, "zero tolerance" to any form of corruption, inevitability of punishment for corruption or related to corruption offenses, transparency and openness of activity.

In 2020, the corruption prevention was carried out in accordance with the requirements of the anti-corruption legislation and the NBU's Anti-Corruption Program for 2020–2021, approved by the decision of the NBU Board.

With a view of preventing, detecting, eliminating, and combating corruption, the NBU regularly implements the following measures:

- application of the collegiality principle when making important decisions
- regulation of processes of NBU units' operation
- control over compliance of NBU employees with anticorruption restrictions, requirements regarding prevention and resolution of conflict of interest, other requirements of anti-corruption legislation
- periodic assessment of corruption risks inherent in the NBU's activities and implementation of measures to eliminate (minimize) the identified corruption risks
- verification of the details of applicants for positions of NBU officials
- control over timely submission of declarations by NBU officials as the persons authorized to perform functions of the state or local authorities
- command investigations and inspections and implementation of measures of prosecution of persons guilty of corruption or corruption-related offences
- building awareness of the anti-corruption legislation among NBU employees, methodological and consultation support on compliance with the laws on corruption prevention
- developing the culture of whistle-blowing within the NBU of possible facts of corruption or corruption-related offences, methodological and consultation support
- implementation of other measures provided for by the current anti-corruption law.

#### Labor Safety

The NBU's main principle is to prioritize its employees' lives and health in the course of attaining production and economic results.

The basic principles of labor safety at the NBU are as follows:

- creating and maintaining safe labor conditions that cause no harm; giving priority to the life and health of employees in the course of their work
- labor protection in line with the state labor protection policy
- ensuring uninterrupted and effective functioning of the labor protection management system, and realization of the staff's constitutional right to protect their lives and health in the course of their work
- raising the level of industrial safety by implementing advanced technologies and equipment, along with scientific and technical breakthroughs, mechanization and automation of production, while complying with ergonomic requirements
- organizing and exercising control over labor conditions to meet the requirements of state regulations on labor protection.

The NBU puts in constant effort to create safe working conditions. Ad-hoc meetings of the Attestation Commission are held and laboratory research of working conditions are performed to identify excessive exposure to hazardous and harmful factors.

Responsibility for using/maintaining high-risk equipment has been introduced.

The NBU has developed and implements the following:

- internal special training in occupational safety under nine thematic programs and the basic fire prevention program for NBU head office employees, performing high risk (including high fire risk) work
- labor and fire safety briefings (introductory and on-thejob) for NBU head office employees
- labor safety instructions
- the list of works that require safe work permits
- provision of the NBU employees with collective and individual protection equipment, special work clothes and footwear.

#### NBU Corporate Nonstate Pension Fund (CNPF)

More detailed information about the NBU's relationships with the CNPF is provided in Note 1 to the consolidated financial statements for the year ended 31 December 2020.

The CNPF's purpose is to attract highly qualified specialists to the NBU, reduce labor turnover, and create decent support for the participants after their retirement. Its activity is aimed solely at accumulating pension contributions with further assets management and pension payments to CNPF participants.

The NBU, being a socially responsible employer, provides its employees of retirement age with stable benefits.

#### Voluntary health insurance system

The NBU has procured voluntary health insurance services for its employees and Board members in order to further motivate the staff, protect its employee's health and preserve working efficiency.

Additionally, with assistance from the insurance company within the Total Rewards system the insured NBU's staff received the opportunity to use a new benefit: to visit a webinar with a psychologist, to obtain advice from experts, and to make an appointment for free individual consultations — all aimed at ensuring security protection and self-realization.

The program was launched in July 2020. 29 employees had 94 individual appointments in the course of the program.

For information on indicators related to employees' health concerns, see Part 4

# Primary Labor Union Organization of the National Bank of Ukraine (hereinafter – Labor Union)

Social initiatives of the Labor Union are:

employees' health care, notably because of COVID-19

- measures to prevent accidents Collective agreement has been signed for 2018-2023
- cooperation with the NBU administration to mitigate adverse effects of dismissals.

The Labor Union focused its activities on the following areas during 2020:

1. Promoting a healthy lifestyle:

- partial reimbursement of admittance to health resorts for the Labor Union members and their children (16 years and under)
- partial reimbursement of sports club (Sport Life club, in particular) membership for the Labor Union members and special prices for close relatives
- support of the NBU teams in football, table tennis, and marathon running

2. Reviewing information on planned dismissals of employees

- reviewing petitions, filed by the NBU administration, for dismissal of the Labor Union members
- consulting in collaboration with the NBU administration on preventing dismissals, minimizing their number, and mitigating their adverse effects
- developing measures to minimize the negative impact of dismissals on Labor Union members.

For information on indicators of the Labor Union activities, see Part 4.

#### **NBU Employer Brand**

The NBU's Employer's value proposition (hereinafter – EVP) was approved for various target audiences of job candidates (students, young professionals, experts) as a part of the strategic goal of Developing the Employer Brand Concept of the National Bank of Ukraine and its Promotion Strategy. Moreover, the Employer Brand Concept was advanced and synchronized with the NBU Strategy of the Corporate Brand. After conducting the abovementioned research of different target groups regarding their future workplace expectations, we developed the CV templates on EVP basis to use when applying for job search sites, Facebook, LinkedIn groups, Telegram channel of the National Bank of Ukraine, universities' websites and student communities, as well as for the official website of the National Bank of Ukraine. The CV's are published under criteria and job preferences of the future employer.

The NBU searched for intellectually and creatively gifted youth for effective work in the NBU by organizing and supporting the internships of students, involvement into job fairs, and engagement into other projects in order to ensure the development of the NBU Employer Brand.

The NBU engaged 43 trainees and 12 interns from the students of Ukrainian universities.

Seven of them were given jobs at the NBU after successful internship.

In February 2020, a conference and excursion through the building of the National Bank of Ukraine and the State Treasury of Ukraine was organized for the youth organization "Foundation of Regional Initiatives"; a lecture and an excursion through the building of the National Bank of Ukraine was conducted for students of Taras Shevchenko National University of Kyiv.

In March 2020, the NBU participated in job fair of IMPULSE online STUD-FEST.

In December 2020, the central bank organized online lectures for students of master's programs on the following topics:

### 3.6. Natural Resources

Natural resources include renewable and nonrenewable natural resources and processes that enable provision of services. These are namely air, water, land, minerals, fossils, forests, and ecosystem biodiversity and health.

Natural resources are not key in the NBU's activities. However, the NBU pays taxes and compulsory payments for their use, such as land charge, charges for the use of radio frequency, for air and water emissions, and transport tax, etc. The NBU implements the environment protection policy. The NBU recognizes expenses related to paying taxes and environmental protection activities mainly as administrative and other expenses in Consolidated Statement of Profit or Loss and other Comprehensive Income .

The NBU produces a minor effect on the environment. However, the structure of the National Bank of Ukraine includes a separated unit — NBU Banknote Printing and Minting Works production facility, for which the issue of environmental protection raises higher concern.

The NBU Banknote Printing and Minting Works adheres to and complies with the requirements and regulations of the Labor and Environmental Protection Policy of the NBU Banknote Printing and Minting Works (hereinafter – Policy).

The current system of ecological protection of the NBU Banknote Printing and Minting Works complies with the DSTU ISO 14001:2015 standard and is developed, implemented, and honed under risk-oriented thinking as a set of interrelated processes, aimed at increase in the production performance, rational use of natural resources, reduction of

- National Bank of Ukraine: Role, Development Strategy, Vision and Mission
- Corporate Governance at a Bank
- Practical Approaches to Organizing Corporate Governance at Ukrainian Banks.

In 2020 several (online) student competitions were organized: in July 2020 — the final of Coronavirus Crisis: the NBU Strikes Back case; in August — the final of NBU IT Challenge for IT students.

All the organized events were an opportunity to boost interest of nominees for positions at the NBU, increase the number of applicants for announced job vacancies and improve recognition of the NBU's employer brand.

In November 2020, the NBU has been awarded the HR-Brand 2020 Ukraine prize in the State as Employer category.

environmental load within the area of facility's possible impact.

The Policy is focused on activity of the NBU Banknote Printing and Minting Works – manufacturing of competitive production – banknotes, coins, state awards, securities, and other production that satisfies the demand of customers and partners of the NBU Banknote Printing and Minting Works with stable quality which meets the state and international standards.

Such possible ways to achieve goals regarding the boost of the facility's energy efficiency and provision of minimal negative impact on the environment are envisaged by the Policy:

- technical re-equipment of the production facility by implementation of advanced technology, highperformance equipment, innovative materials, energy efficiency and resource saving technology, low-waste, no waste and eco friendly technological processes that ensure reduction of negative impact on the environment, human health, and guarantees safe working conditions
- management of significant ecological aspects that impact or may impact the state of environment
- constant analysis and enhancement of current eco management systems
- training, professional development, consultations, and involvement of employees into advancement, implementation and enhancement of environmental protection system.

# 3.7. The National Bank of Ukraine and Its Stakeholders

#### **NBU and Its Stakeholders**

The NBU's medium-term strategy sets out six customer groups of participants in the financial ecosystem according to

their role therein with which the regulator builds up the relationship. These are:

experts

- policy makers in charge of economic and financial policy
- financial sector entities
- business entities
- state as services provider
- Ukrainian citizens.

The NBU interacts with them on the principles of partnership and transparency. The central bank is interested in engaging effectively with all customer groups, since it is a prerequisite for the effective fulfillment of the central bank's mandate and a way of providing preconditions for sustainable long-term economic growth.

The annual meeting with stakeholders has become the flagship event which traditionally opens business season and forms the expectations in accordance with actual plans of central bank. In 2020, the third annual meeting between the NBU and its customers and partners was held in the framework of interaction with different stakeholder groups. The event brought together about 540 quests: representatives of international financial institutions and donors, diplomats, media, experts, business community, banks. etc. The Strategy of Ukrainian Financial Sector Development until 2025, Report on Fulfilment of Comprehensive Program for the Development of Ukraine's Financial Sector until 2020, and the NBU Action Plan for 2020 were presented at the annual meeting. The event provided for the active engagement of the audience in a format of Q&A session and surveying. In this way an open feedback and accountability for the NBU performance in 2019 were secured.

#### **Cooperation With Experts**

The NBU continues its systematic and active interaction with the expert community. According to new entrusted powers the NBU updated a list of stakeholders to be involved into working meetings and professional discussions. The interaction with the experts from nonbank financial market and non-government organizations was enlarged. The NBU continues to work on implementation of best world practices. The engagement of expert community id one of the priorities in development of the institutional relationship system.

#### **Cooperation with International Partners**

In 2020 the NBU continued active cooperation with its permanent partners: Narodowy Bank Polski, Bank of Lithuania, Sveriges Riksbank, National Bank of Georgia, De Nederlandsche Bank, Bank of Canada, Bank of England, Oesterreichische Nationalbank, National Bank of Belgium, and Deutsche Bundesbank. In addition, due to extension of authorities resulting from SPLIT reform, the National Bank of Ukraine activated the interaction with the Central Bank of Armenia, Komisja Nadzoru Finansowego (KNF), and set contacts with the Financial and Capital Market Commission (FCMC), UAE Insurance Authority, Ministry of Finance of Belarus, Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market, Austrian Financial Market Authority (FMA), Federal Financial Supervisory Authority of Germany (BaFin), Insurance Supervisory Agency of Slovenia (AZN).

In 2020 a number of the NBU partners among international organizations extended substantially. In particular, the NBU joined the following organizations:

- International Capital Market Association (ICMA)
- International Credit Union Regulators' Network (ICURN)
- Sustainable Banking Network (SBN)

Transfer of communication in online format during COVID-19 pandemic promoted to substantial extension of the NBU international technical cooperation. A number of events increased almost by 60%, and a number of participants enlarged almost half as much. The NBU experts learned the best world practices and international experience in introduction of monetary policy, financial stability, banking supervision, and regulation, statistics and reporting, operation of payment systems, protection of consumer rights in financial services, efficient communications, etc. A special attention in 2020 was dealt to study of the international experience of nonbank financial institutions regulation.

The key international development partners of the NBU in 2020 as earlier were the International Monetary Fund, the World Bank Group, the European Union, and the central banks and financial market regulators of other countries. The NBU continued its cooperation with the U.S. Agency For International Development (USAID), European Bank for Reconstruction and Development, International Finance Corporation in the framework of Program Financial Inclusion for Economic Growth funded by the Swiss Confederation and the UK Good Governance Fund, as well as Swiss State Secretariat for Economic Affairs (SECO). The NBU has successfully implemented a number of technical assistance projects with the mentioned partners.

An important result of the last year was the fact that the NBU shared more actively with its own expertise with the international partners. Besides, the central bank of Ukraine has become more often a platform for international multilateral conferences, meetings, roundtables, and bilateral expert events and meetings with the central banks of other countries. In 2020, 24 those bilateral and multilateral events on experience exchange took place. In particular, the NBU experts shared their experience with the central banks of 30 world countries, including Georgia, Kazakhstan, Tunisia, Armenia, Turkey, and France.

During the year the NBU also actively engaged into processes related to enhancement of Ukraine's investment attractiveness for foreign partners: a range of virtual meetings with the international rating agencies Fitch Rating, Standard&Poors, Rating&Investment Information, Global Ratings were held, as well as the meetings with the international investment funds.

#### **Cooperation with Government Authorities**

The NBU interacts with such Ukrainian government authorities as the Verkhovna Rada of Ukraine, Cabinet of Ministers of Ukraine, and area-specific ministries, other government agencies.

To maintain its active position regarding improvement of the Ukrainian legislation, the NBU:

- interacts with the Verkhovna Rada of Ukraine and its committees and members of parliament and their assistants on issues that fall within the central bank mandate
- provides comments and suggestions for draft laws
- presents the NBU's viewpoint to parliamentary committees during the process of finalizing draft laws.

The active cooperation with the Verkhovna Rada of Ukraine in 2020 resulted in approval of the laws important for the financial sector reforming.

The representatives of the NBU take active part in the work of the Verkhovna Rada committees. In 2020, members of the Board, Directors of Departments, and employees of the NBU attended 15 meetings of the Verkhovna Rada Committee on Finance, Tax, and Customs Policy. Thus, the committee held two meetings with the participation of the NBU Governor, two meetings with Deputy Governors, and seven meeting with the NBU Department Directors.

Furthermore, the NBU representatives at the level of Department Directors and area-specific specialists attended meetings of the other committees of the Verkhovna Rada, namely:

- Economic Development Committee 2
- Committee on Ukraine-EU integration 1
- Committee on Organization of State Power, Local Self-Government, Regional Development, and Urban Development - 1
- Committee on Social Policy and Protection of Veterans' Rights - 7
- Anti-Corruption Policy Committee 2
- Agricultural and Land Policy Committee 1
- Digital Transformation Committee 1
- Legal Policy Committee 1
- Committee on Foreign Affairs and Interparliamentary Cooperation - 1

The NBU duly accounts on its work to the Verkhovna Rada and the President of Ukraine. Thus, on the annual basis, the NBU submits to the President of Ukraine, the Verkhovna Rada of Ukraine and the Cabinet of Ministers of Ukraine the following:

 by 1 March of the current year, preliminary information on the calculation of the part of projected distributable profit to be transferred to the state budget, for the following three years

- by 15 March of the current year, monetary indicators and exchange rate policy indicators (including exchange rate of hryvnia, average for the year and as at the end of the year) estimated for the next three years
- by 15 April of the current year, finalized information on the calculation of the portion of projected distributable profit to be transferred to the state budget, for the following three years.

The NBU interacts with the Cabinet of Ministers of Ukraine and the ministries for the purposes of attaining a sustainable economic growth and price stability. In 2020, the NBU cooperated with the following ministries:

- Ministry of Finance and financial regulators in the scope of the Financial Stability Council activities. In 2020, the Council held five meetings
- Ministry of Finance in the scope of work of Accounting Methodology Council and IAS Methodology Council. In 2020, the Methodology Councils held three meetings each.
- Ministry of Digital Transformation in the areas of digitalization, digital development, digital economy, digital innovations, development of information society, citizens' digital skills and rights
- Ministry of Economy on updating approaches to agricultural insurance promotion
- Ukrainian Parliament Commissioner for Human Rights in the area of personal data protection to ensure a proper protection of the citizens' personal data in a process of obtaining financial services.

In 2020, the NBU has signed memorandums on cooperation with the Cabinet of Ministers of Ukraine, Ministry of Digital Transformation, Ukrainian Parliament Commissioner for Human Rights.

In 2020, 13 meetings of the National Security and Defense Council of Ukraine attended by the NBU Governor had place. Thus, the NBU Governor Yakiv Smolii took part in five meetings of NSDC of Ukraine and the Governor Kyrylo Shevchenko participated in eight meetings. Besides, two meetings of the National Coordination Center for Cybersecurity at the National Security and Defense Council of Ukraine were held last year in which the NBU Deputy Governor Sergii Kholod took part.

# Cooperation with Business Community (financial sector representatives and business entities)

The interaction of the NBU with the business community being active and systemic was implemented in various formats. In particular, about 170 events were organized, most of them had place online taking into account the restricted conditions for conducting onsite meetings due to the pandemic. In addition to traditional cooperation formats (speaking engagement at business associations meetings and work in their committees, bilateral meetings and business lunches), the NBU has conducted targeted campaigns of stakeholders engagement. Thus, a series of events for export companies was held with participation of the Export Credit Agency and Ministry of Economic Development. By results of these events a complex of actions for support of export companies was developed. The NBU introduced amendments to regulatory framework on credit risks assessment that simplify the access to lending for businesses.

While preparing the updated regulation of nonbank financial sector after approval of the Law of Ukraine On Amendments to Certain Laws of Ukraine to Improve Functions on State Regulation of Financial Services Markets (SPLIT), more than 70 meetings were held with the respective representatives of business community.

In 2020, a new legislation on financial monitoring came into effect. To support its adoption and involve target audience more than 40 meetings with the representatives of financial market and business community were held.

In a partnership with the Office of the National Investment Council a new initiative was launched to improve the cooperation with the representatives of investment community and present the NBU's information products to investors.

#### **Cooperation With Citizens**

As to cooperation with citizens, the central bank's efforts were aimed at timely provision in plain language of the information about the central bank's policy, as well as improvement of financial literacy among Ukrainian citizens.

In particular, as part of improving financial literacy, in 2020 financial awareness events took place for different target audiences and of various scale. The detailed information on those events is provided in Part 4.

# Working Group (Committee) On Financial Development at the Financial Stability Council

The implementation of the Strategy for Ukraine's Financial Sector Development until 2025 provides for establishment of

### 3.8. Main Risks

#### **NBU Risk Profile**

The NBU's risk profile comprises both financial and nonfinancial risks.

**Financial risks** constitute the risks that arise in connection with financial instruments. The NBU's financial risks are grouped as follows:

 financial risks related to the policies determined and conducted by the NBU (hereinafter referred to as NBY policy financial risks). These risks arise from financial instruments, when their recognition on the NBU's balance sheet or off balance is related to the central a steering committee and that the heads of the signatory institutions will take part in it.

To this end, in late 2019, the Financial Stability Council made decision at its meeting to establish a Financial Development Working Group (Committee) at the Financial Stability Council.

Main tasks of the Working Group are as follows:

- identifying the directions and priorities for the implementation of the Strategy for Ukraine's Financial Sector Development until 2025
- facilitating the coordinated implementation of the measures stipulated in the Strategy for Ukraine's Financial Sector Development until 2025; monitoring the effectiveness of their implementation
- consideration of proposed action plans for financial sector development.

The Committee's founding meeting was held on 16 January 2020. At this meeting the Committee agreed how to organize the Strategy implementation; the work on introduction of unified principles and project reporting forms started.

A communication platform with participation of representatives of market and area-specific experts was established at the Committee. In 2020, two meetings of this consultative platform had place. At these meetings the following issues were discussed:

- Work of consultative platform and Financial Development Committee: further steps
- Consideration of proposals for inclusion into the Strategy
- Strategy implementation
- Fintech Development Strategy in Ukraine until 2025
- How the COVID-19 pandemic has affected the financial sector of Ukraine.

By results of these meetings the respective proposals for the Strategy finalization were submitted for consideration of the Financial Development Committee.

bank's performance of its main function and other functions, as set forth in Articles 6–7 of the Law of Ukraine *On the National Bank of Ukraine*, with the exception of Article 7 paragraph 15 thereof. This category includes, in particular, financial risks that relate to the use of standard instruments by the NBU for regulating the banking system liquidity, FX purchase and sale swaps, FX interventions, emergency liquidity assistance, and redemption of domestic government bonds.

financial risks arising from Ukraine's international (foreign exchange and gold) reserves

- financial risks arising from the management of the pension assets of the NBU Corporate Nonstate Pension Fund
- other financial risks.

Each financial risk category includes several risk types defined by the factors that cause the respective risks. In particular, the NBU distinguishes between liquidity, credit and market risks.

**Nonfinancial risks** include the risks of the NBU that arise in connection with nonfinancial factors.

The NBU's nonfinancial risks are as follows:

- operational risk is the potential threat of direct or indirect losses stemming from improper or failed processes, incorrect actions by NBU employees, failures of internal systems, or external events
- compliance risk is the risk of sanctions against the NBU, financial or reputational losses due to noncompliance by the NBU or its employees with the laws of Ukraine, NBU regulations and orders, including the code of ethics and the rules for the prevention and resolution of conflicts of interest
- strategic risk is the probability that the NBU does not achieve its strategic goals or performs its functions inefficiently due to incorrect strategic management decisions and inadequate responses to changes in the external environment.

When managing financial and nonfinancial risks, the NBU takes into account the potential impact of their materialization on its reputation, but does not separately distinguish a reputation risk.

NBU orders on risk management set out the management policy for certain types of NBU risks, its risk tolerance level, and its risk appetite. The activities of the NBU units are carried out within the established risk appetite.

The NBU's risk profile saw no major change in 2020.

#### **Risk Management Process**

The NBU Board organizes the risk management process and system in such a way that they correspond to the functions, specifics, and role of the NBU as Ukraine's central bank and special central body of public administration determining Ukraine's monetary policy.

The NBU's risk management system aims to support its institutional capacity and independence by protecting its assets, capital, and reputation, as well as maintaining the level of trust in the central bank and the policy that the NBU develops and implements.

The NBU's risk management system is based on holistic risk management as a systematic and continuous process. It is run by the NBU Board and NBU employees, starting from the NBU's strategy development and throughout its whole activity.

The NBU's risk management process is a continuous process incorporated in the management of the NBU at all organizational levels, and embedded in the corporate culture and daily activities of the NBU. This process is aimed at detecting events that may adversely affect the NBU's activities, and the management of risks related to such events within the set level of risk appetite, in order to ensure that the NBU performs its functions and achieves its goals.

The NBU's risk management process comprises the following interconnected components:

- internal environment and risk management culture
- risk management circumstances (context)
- detection of events that can have an adverse impact on the NBU's operation
- risk assessment
- measures in response to risks (counterreaction to risks)
- control function
- information, communications, and reporting
- monitoring and review of the risk management system.

The NBU's **financial risk management policy** covers all of the central bank's assets and liabilities (both on- and off-balance-sheet items).

The NBU's **operational risk management policy** covers all processes and projects of the NBU.

The operational risk management process has the following stages:

- prevention of operational risks
- identification of operational risks
- assessment (measurement) and analysis of operational risks
- monitoring of operational risks and reporting
- development of measures for operational risk management
- implementation of measures for operational risk management
- evaluation and monitoring of the results of the implementation of measures for operational risk management.

The NBU is conducting regular training events in order to enhance its operational risk management culture and raise awareness of these risks among top managers and employees.

#### Internal Control System

The NBU has introduced a uniform and structured approach to ensure the effective performance of the NBU's functions, its stable and continuous operation, cooperation between NBU units at all organizational levels, and to introduce a corporate culture of organizing and developing the NBU's internal controls.

The NBU's internal controls and risk management are interrelated and complementary systems with aligned goals and based on the **three lines of defense policy**.

The NBU units, which are the **first line of defense**, own all of the risks that fall under their mandate and are responsible for identifying, measuring, managing and reporting such risks.

The Office for Financial and Operational Risks performs the functions of the **second line of defense** and is responsible for the following:

- methodological, organizational, and coordination support of the NBU's risk management process
- overseeing, monitoring, and conducting an independent risk analysis at the level of the NBU's second line of defense
- annual assessing the NBU's risk profile and reporting the NBU's risks to the NBU Board and other collegial bodies of the NBU.

The Internal Audit Department performs the functions of the **third line of defense**.

#### **Business Continuity Management**

The NBU performs the following functions to ensure the business continuity:

- testing and configuring backup workplaces as part of implementing the NBU's General Business Continuity Plan and Plan for the Recovery of IT Resources After Failures
- conducting an annual analysis of the impact of adverse factors on the NBU's processes and the operational continuity of its units
- updating the NBU's business continuity plans
- annual training in the area of business continuity.

Notes 22–27 of the NBU's Consolidated Financial Statements contain information on the stages of the financial risk management process, the measures taken by the NBU in response to financial risks, and a detailed evaluation of the risks.

# Part 4. Overview of Key Indicators

# 4.1. Overview of Key Indicators

The NBU introduced International Financial Reporting Standards (IFRS) approved by the International Accounting Standards Board in the preparation of its financial statements in 1998, and has been fully compliant with the standards since 2012.

NBU financial statements cover the consolidated financial statements prepared according to the IFRS, the Laws of Ukraine On the National Bank of Ukraine and On Accounting and Financial Reporting in Ukraine.

As of the end of 2020, the NBU's balance-sheet total increased by 26%, to UAH 1.332 billion.

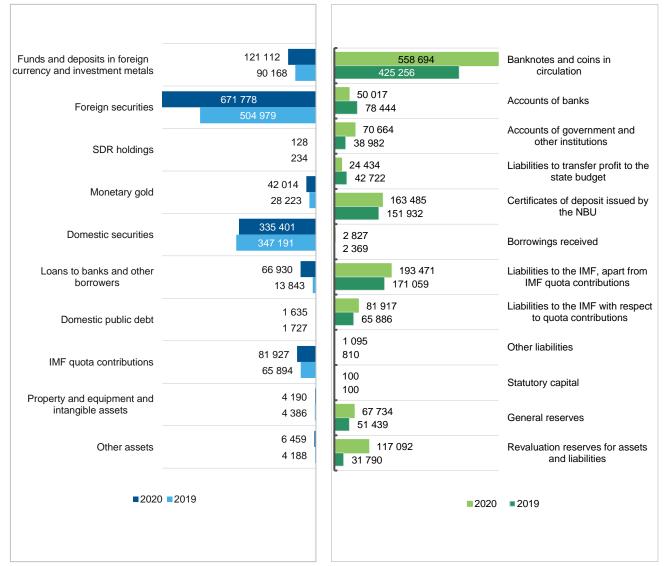
In 2020, the central bank continued to execute its functions, forming the corresponding profile of its assets, liabilities, and equity.

The NBU's assets mainly consist of:

- foreign securities
- domestic securities
- funds and deposits in foreign currency and investment metals.

The NBU's liabilities mainly include:

- banknotes and coins in circulation
- liabilities to the IMF
- certificates of deposit issued by the NBU.



#### Figure 1.NBU's assets and liabilities in 2019–2020, UAH million

The following changes occurred in the NBU's assets and liabilities in 2020.

International reserves increased as a result of the central bank's policy of accumulating reserves.

Overall, international reserves rose by 15%, to USD 29.1 billion as of year-end 2020, up from USD 25.3 billion at the end of 2019.

This increase was caused by proceeds of USD 12.4 billion in favor of Government, including from placement of domestic government bonds in USD 4.9 billion, placement of Eurobonds in USD 3.1 billion, and a loan tranche from IMF under SBA program in USD 2.1 billion, and other international creditors in USD 2.3 billion.

The positive balance of NBU interventions of USD 1.0 billion along with the changes in market value of financial instruments and hryvnia exchange rate against foreign currencies, etc., also helped the international reserves grow.

The decrease of the international reserves resulted from the governmental payments under external and internal liabilities and repayment of debt to IMF.

The main financial instruments for international reserves management during the year were the securities (increase of foreign securities by 11.4% in USD equivalent) issued by nonresidents, short-term deposits in nonresident banks, funds on correspondent accounts in foreign banks (increase of funds and deposits in foreign currency and investment metals was 12.5% in USD equivalent).

The NBU's hryvnia assets are mainly comprised of domestic securities, the value of which decreased by UAH 11.8 billion or 3.4% in 2020, to UAH 335 billion. This, together with the rise in assets that form international reserves, reduced the percentage of domestic securities in the NBU's balance-sheet total to 25.2% in 2020, down from 32.7% in 2019. Of the domestic securities, 99.6% are securities held to generate

cash flows in line with the terms of issue, and are accounted at their amortized cost.

The NBU's loan portfolio grew 4.8 times, mostly due to loans issued to banks via the NBU's tendering procedure. The main share of increase was related to introduction of long-term lending instruments. Thus, the gross carrying amount of (outstanding debts) loans increased by almost UAH 52 billion, to UAH 104 billion, UAH 48.4 billion of those are long-term loans. The loan repayment trend continues to banks remaining on the market after the banking system cleanup. Gross carrying amount of loans to those banks reduced by UAH 9.9 billion. At the same time, the amount of expected credit losses (loan loss allowances) also declined, by UAH 1.1 billion. 40.4% of debts outstanding as of the end of 2020 consisted of the problem debts of banks that were being wound up.

Separate from its liabilities to the IMF, the NBU's liabilities changed as follows:

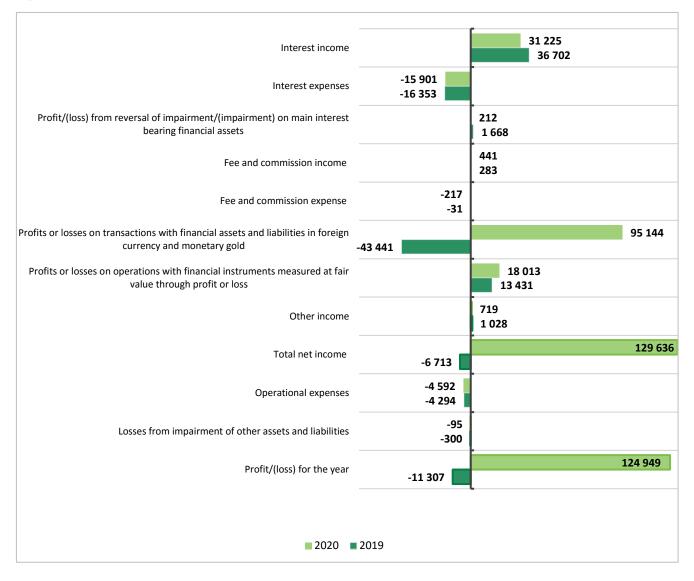
- banknotes and coins in circulation grew by 31%
- certificates of deposit issued by the NBU increased by 7.6%
- funds due to state institutions and other institutions increased by 81%
- liabilities to transfer profits to the state budget decreased by 43%
- banks' funds declined by 36%.

#### **Financial Results**

Factors that influence the NBU's profits the most are interest income and exchange differences, which result from the revaluation of assets and liabilities that arise from changes in the official exchange rate.

Interest income, mainly from domestic securities and loans to banks, declined compared to 2019 and reached UAH 31.2 billion, accompanied by a decrease in domestic securities and average interest rates.

#### Figure 2.NBU profit or loss in 2019–2020, UAH million



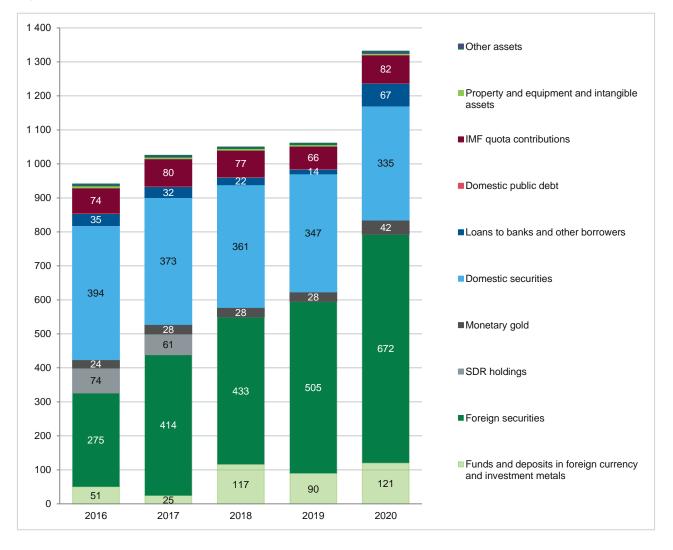
In 2020, interest expenses reduced by 3%, to UAH 15.8 billion, which was mostly due to reduction of expenses for liabilities to IMF under which the interest is paid. At the same time, higher expenses on NBU certificates of deposit associated with the volume increase were observed as weighted average interest rates reduced to 5.68% in 2020 from 12.73% in 2019.

In 2020, the NBU continued to reverse loss allowances for loans issued to banks. Overall, expenses decreased by UAH 212 million (UAH 1,668 million in 2019) (positive result) on the account of reversal of the impairment of main financial assets.

Net interest income (including the released impairment reversal of impairment) totaled UAH 15.5 billion in 2020, which was 29% lower than in 2019.

After the switch to a floating exchange rate regime, exchange rate fluctuations have exerted a significant influence on the NBU's performance. In particular, in 2020, the exchange difference was positive at UAH 95.1 billion (while in 2019 it was negative at UAH 43.4 billion).

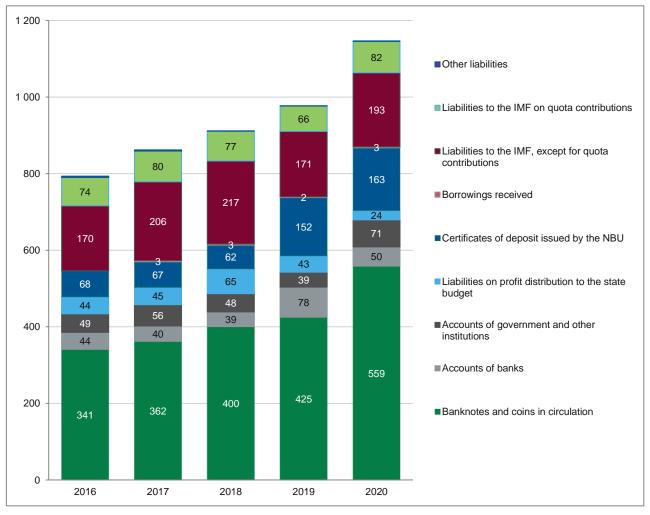
NBU administrative and other expenses increased by 7.1% from UAH 4,294 million (in 2019) to UAH 4,592 million (in 2020). In 2020, provisions was raised for court complaints amounting to UAH 92 million (in 2019 provisions for court complaints were UAH 119 million).



#### Figure 3.NBU assets in 2016–2020, UAH billion

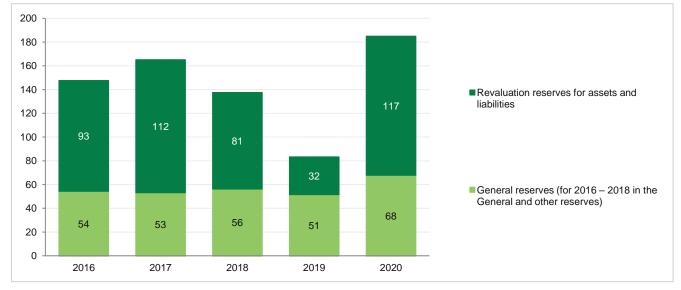
Over the past five years, the main changes in the NBU's asset structure came from increases in foreign securities and other components of international reserves, and a decline in the domestic securities portfolio, which contains mostly government bonds. Portfolio of loans to banks increased in 2020, for the first time over the past five years.

#### Figure 4.NBU liabilities in 2016–2020, UAH billion



In general, the liabilities structure almost has not changed over the past five years.

A large portion of the NBU's liabilities consists of banknotes and coins in circulation, liabilities to IMF, and NBU certificates of deposit.



#### Figure 5.NBU equity in 2016–2020, UAH billion

The NBU's equity, which is the residual value of assets after deducting liabilities, was mainly formed from sources other than government contributions. The NBU's equity consisted of the deferred unrealized revaluation of the NBU's assets and liabilities, including due to exchange rate fluctuations, and a part of the profits retained by the NBU as reserves, as required by law.

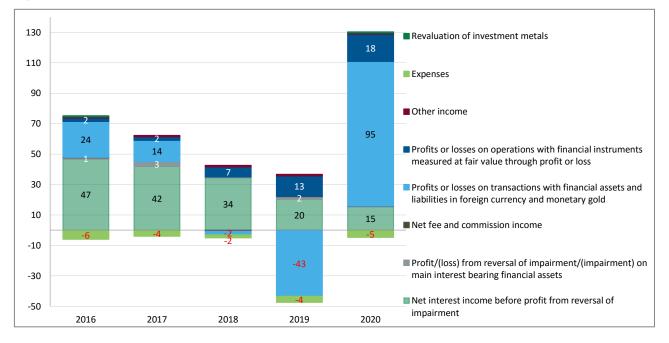
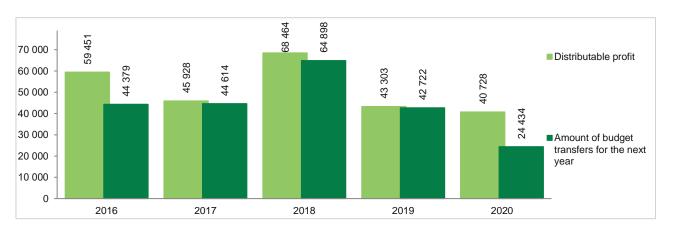


Figure 6. NBU income and expenses in 2016–2020, UAH billion

Net interest income as usual was the main contributor to the NBU's financial result. The central bank's financial performance is also influenced by changes in the exchange

rate due to the floating exchange rate regime and a large share of FX items being on the NBU's balance sheet.





#### Payments to the State Budget of Ukraine

In 2020, the NBU transferred UAH 42.7 billion to the State Budget of Ukraine. As of 31 December 2020, the central bank recognized its obligation to pay UAH 24.4 billion of its profit to the state budget.

The NBU's remaining distributable profit of UAH 16.3 billion will be set aside to create general reserves

of the NBU, once the central bank's annual financial statements are approved by the NBU Council.

Read more about the changes in accounting policy in Section II.I Financial Instruments Note 4 of the NBU's Consolidated Financial Statements. Read more about identifying the distributable profit, liabilities to transfer the distributable profit to the State Budget of Ukraine, and creating general reserves of the NBU in Note 29.

### 4.2. Overview of Other Indicators

#### 4.2.1. Financial resources

#### **NBU's Administrative Expenses**

The below table provides data on key items in the administrative budget for 2020 and planned data for 2021.

The NBU operates under the administrative budget, which is drafted for the year ahead and approved by the NBU Council.

#### NBU's administrative expenses (including expenses of the Settlement Center) for 2020–2021

	Plan for 2020 (revised)	Actual performance in 2020	Percentage of plan performance in 2020	Plan for 2021
				(UAH million)
Staff costs	2,099	2,049	98%	2,372
Administrative and other expenses	1,103	521	47%	651
Depreciation and amortization	226	203	90%	224
Total administrative expenses	3,428	2,773	81%	3,247
Provisioning on assets, and other provisioning	(663)	(111)	17%	10
Investments in accumulating and expanding logistic resources, and in procurement	567	251	44%	694

The data presented show that the NBU is complying with its planned administrative expenses and is managing to save resources. This is in line with the NBU's goal of using public resources efficiently and effectively, as stipulated in its seventh strategic goal to be a modern, open, independent, and effective central bank.

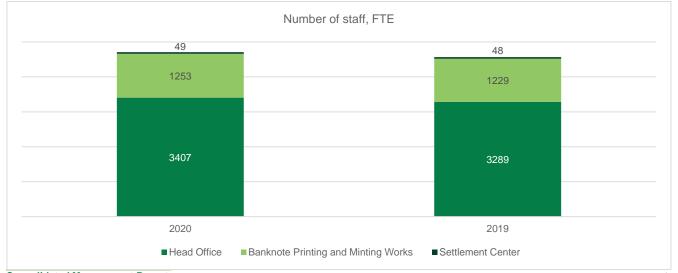
According to the results for 2020, administrative expenses were lower than planned by 19% on average. In 2020, the write-back of provisions had place in amount lower than planned. This was mainly due to write-back in 2019 of major part of provisions planned for 2020.

Respectively, in 2020 the planned indicators of administrative expenses under section Provisioning on assets and other provisioning were amended according to the current NBU procedure (the planned amount of write-back for 2020 was reduced).

Also, most of the funds intended for developing facilities and equipment of the NBU remained undrawn. It was mainly related with quarantine restrictions and transfer of terms for implementation/closure of certain projects and measures.

#### 4.2.2. Human Resources

As of 31 December 2020, the NBU staff number increased by 3.1% compared with the previous year and was 4,708 FTEs (staff at work), as of 31 December 2018it was 4,566 FTE.

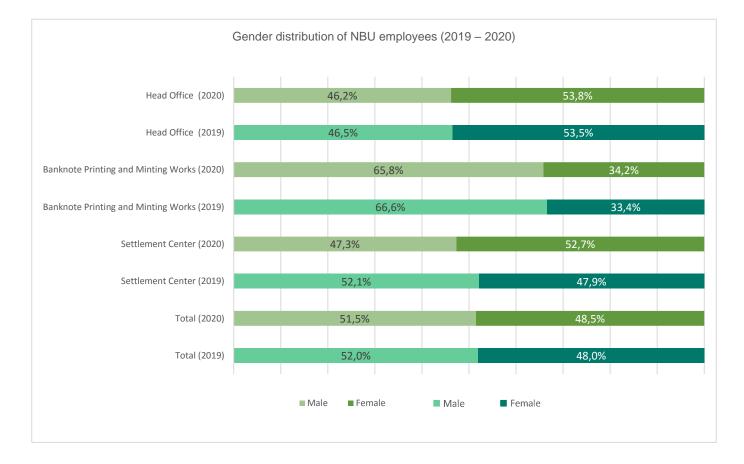


Consolidated Management Report for the year ended 31 December 2020

As at 31 December 2020, the average age of an NBU employee was 44 years, and the average employee tenure for the NBU was 12 years (these figures do not change for the last 4 years). NBU employee gender distribution is as

follows: the NBU's Head Office employs 53.8% females and 46.2% males, the Banknote Printing and Minting Works -34.2% females and 65.8% males, Settlement Center - 52.7% females and 47.3% males.





#### The NBU staff structure by occupational classification as of 31 December 2019 and 31 December 2020 was as follows:



For more information on the NBU labor costs in 2020 refer to Note 34 of the NBU Consolidated Financial Statements.

In 2020, the average base pay (or the base component of remuneration) was UAH 31,582 at the NBU Head Office; UAH 15,740 at the Banknote Printing and Minting Works; UAH 31,975 at the Settlement Center.

The average salary including additional payments (salary supplements, bonuses, extra pay, etc.) was UAH 51,983 at the NBU Head Office; UAH 21,892 at the Banknote Printing and Minting Works; and UAH 38,075 at the Settlement Center..

In 2020, the NBU spent UAH 2.1 million on personnel training, of which UAH 0.2 million was spent on training abroad (UAH 5.9 and UAH 2.4 million in 2019, respectively).

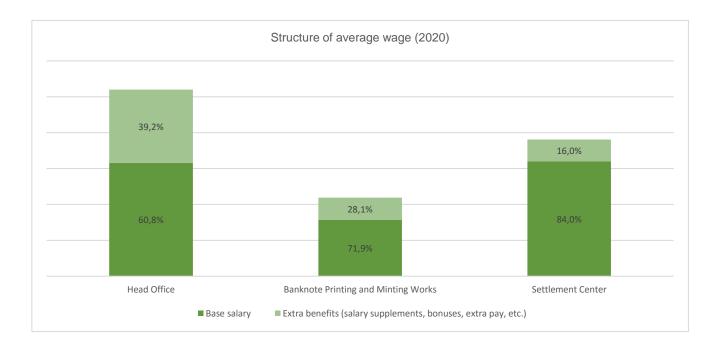
In 2020, addressing the challenges due to quarantine restrictions and taking care of the employees' health, the NBU has quickly and flexibly transferred the training into online format.

In 2020, the NBU held 549 training events to develop professional and personal skills of its employees. The events were attended by 10,940 people. The transfer to online mode made it possible to extend by 70% the number of employees who received training. In particular, 320 events were dedicated to raising professional qualification. 255 persons received training from international partners in the framework of the international technical assistance.

Master classes on 12 behavioral competencies were transferred into webinar format. In-house coaches were actively involved into these activities.

Within the Leadership Development Program 8 online events were held, the Program of Succession Pool Development proposed 5 webinars in remote mode.

At the same time, the Remote Training System actively developed offering 36 e-learning courses by professional areas and 23 courses on interpersonal communication skills.



#### 4.2.3. Production resources

#### State property management

As of 31 December 2020, the NBU managed and had listed in the Unified Register of State Property 370 of its own real assets, including 57 land plots and 313 buildings and engineering structures (measuring 546,000 sq. m in area). As of 31 December 2019: 407 own real assets, including 66 land plots and 341 buildings and engineering structures.

As of late 2020, the NBU completed 80% of its Real Assets Management Strategy. In 2020, the central bank reduced its real assets portfolio by 28 buildings and structures and 9 land plots.

The detailed information on the NBU buildings and engineering structures is given in Note 30 of the NBU Consolidated Financial Statements.

#### **Collateral management**

In 2020, the NBU received UAH 2.2 billion in repayment of debt on refinancing loans of insolvent banks (in 2019: UAH 3.6 billion).

Most of the proceeds – UAH 1.018 billion – came from the disposal of the property rights pledged by insolvent banks under loan agreements (in 2019: UAH 1.727 billion).

The NBU recovered part of the debt on its refinancing loans to insolvent banks also by:

- sale of real estate pledged by insolvent banks under loan agreements: UAH 228.8 million (in 2019: UAH 298 million).
- sale through enforcement proceedings of real assets pledged as security by property surety providers of insolvent banks in total amount of UAH 73.4 million (in 2019: UAH 181 million)
- receiving UAH 252.3 million in repayment of debt under loan agreements pledged to the NBU (in 2019: UAH 89 million)
- taking ownership of a total UAH 357.8 million in pledged real assets (in 2019: UAH 218 million)
- receiving a total UAH 248.0 million from other sources of debt repayment (in 2019: UAH 1.092 billion, including UAH 924 million by taking ownership of securities).

		2020			2019	
-	Through DGF	Through third parties	Total	Through DGF	Through third parties	Total
Repayments at the expense of sale of pledged:						
real estate	229	73	302	298	181	479
property rights to secured loans	1,018	_	1,018	1,727	-	1,727
Total repayments at the expense of sale of collateral	1,247	73	1,320	2,025	181	2,206
Repayments through NBU acquisition of title to:						
real estate	118	240	358	-	218	218
Yield on securities	-	-	-	-	924	924
from other sources	252	248	500	89	168	257
Total	1,617	561	2,178	2,114	1,491	3,605

The NBU filed a total 123 lawsuits seeking to recover the assets of property surety providers and financial surety providers in repayment of debt under loan agreements of insolvent banks.

All court rulings involving financial surety providers and property surety providers that had taken effect as of the end

of 2020 were in favor of the NBU and are being enforced. Court rulings in 43 cases had not taken effect as of the end of the year (in 2019: 60 cases), including 10 cases concerning the bankruptcy of property surety providers (in 2019: 10 cases).

#### 4.2.4. Intellectual resources

The intellectual resources of the National Bank of Ukraine being intangible assets comprise mainly of software and licenses for its use.

## Extension of the Reporting System in accordance with its new functionality

In 2020, the NBU continued the started in previous years improvement of reports submitted to the NBU by reporting

entities. The largest challenge in this area (successfully managed by the NBU) was a transfer of the reporting of nonbank financial institutions and reporting of the entities other than financial institutions but are entitled to provide certain financial services, to the NBU as a new regulator performing since 1 July 2020 state regulation and supervision over their activities according to the Law of Ukraine On Amendments to Certain Laws of Ukraine On the Consolidation of Functions of the State Regulation of the Financial Services Markets No. 79 dated 12 September 2019.

Compliant to this law and in the framework of SPLIT project (reporting component) the NBU as of 1 July 2020 secured complete transfer of reporting of over 2000 participants of the nonbank financial services market, including insurers, credit unions, leasing companies, pawnshops, insurance brokers, and financial companies, into electronic format XML used for automated data processing, by establishing over 50 reporting files. The NBU developed a register of reported indicators of participants of the nonbank financial services market which includes descriptions of indicators, data validation and guidelines for reporting formation, and prepared a draft regulation on this reporting submission to the NBU.

A range of meetings with participants of the nonbank financial services market was held to organize formation of qualitative reports which resulted in receipt by the NBU as a new regulator of a qualitative reporting information.

The system ensures automated processing of reports of the participants of the nonbank financial services market, publishing of information on indicators of the market participants at the NBU website.

For further implementation of the world practices on disclosure of information the NBU continued the work on improving the information systems on disclosure of banks' financial reporting data in accordance with the taxonomy FINREP XBRL, and compiling data on liquidity coverage ratio (LCR) according to taxonomy COREP XBRL. In the framework of data compilation under COREP standard the banks started to submit prudential reporting on calculation of net stable funding ratio (NSFR) and data on minimal operational risk.

The projects of new statistical reporting were prepared: on operational risk events, on interest rate risk in the banking book, and on a new capital structure in accordance with the taxonomy COREP XBLR, and projects of new statistical reporting on problem assets management according to taxonomies FIREP and COREP.

According to agreements concluded with state authorities and international organizations, in 2020 the NBU on the basis of the statistical reporting received from banks prepared and submitted about 6, 500 regular statistical reports, including to the Office of the President of Ukraine, Ministry of Economic Development, Trade and Agriculture of Ukraine, State Statistics Service of Ukraine, State Tax Service of Ukraine. To provide the information to external users the NBU in 2020 created a website and placed in public access a considerable number of tables with historical data series representing a consolidated historical information on transactions of the NBU and banks of Ukraine, starting from 2003 and to the end of 2020.

Since 2017 the NBU holds the meetings with the companies heads twice a year to anchor the inflation expectations, and maintain efficient bilateral interaction with the business community, as well as to inform on its activities. In 2020, the meeting was held in a form of online conference.

In 2020, the NBU created a mobile application to optimize and automatize at most the process of monthly surveying. It is an innovative instrument that can be used for information exchange with business and users of the services provided by the NBU.

#### **Research and Development**

In 2020, the NBU conducted a number of events in the sphere of researches, the most important was an annual research conference <u>Labor Market and Monetary Policy</u> organized jointly with the Narodowy Bank Polski on 28-29 May 2020 with the support of the Kyiv School of Economics and the Government of Canada. Due to the pandemic this conference was held in online format. However, despite certain restrictions the format of event made it possible to extend the active audience: representatives from 32 countries of the world took part in the conference.

In the reporting year the NBU also organized the International Conference *Central Bank Digital Currencies: New Opportunities for Payments*, held 11 open research seminars and workshop on monetary policy.

In 2020, the NBU conducted a fourth conference for students and young researchers *Banking Sector and Monetary Policy: Development Perspectives*, which was held jointly with Kyiv School of Economics. The best papers of the conference were published in the journal <u>Visnyk of the National Bank of</u> <u>Ukraine</u>.

The findings of the previous studies (including working materials series and international peer-reviewed journals) were published in 2020, the usual research and educational events (conferences, seminars, lectures, etc.) were held on a high level, and with the support of joint programs with the Canada-IMF Technical Assistance Project *NBU Institutional Capacity Building* and EABCN (Euro Area Business Cycle Network) new perspective researches were launched.

## IT Development. Software of Own Development and Licenses.

**The NBU's System of Electronic Payments** (SEP) continued to fulfil its functions as the nationwide system of electronic interbank settlements.

In 2020, the SEP handled 385.3 million transactions (1.54 million per day on average) with a total value of more than UAH 44.8 trillion. The average ratio of cash circulation was 218%, some days peaking at more than 750%. Thus, the number of transactions handled by the SEP grew by 0.4% in comparison with previous year, their value grew by 38%, and the ratio of cash circulation increased by 42%.

Two stages of the project Development of the Payment Infrastructure of Ukraine Based on ISO 20022 were implemented:

- at the beginning of 2020 SEP was completely transferred to use of the international standard ISO 13616 - IBAN bank account number
- since August 2020 SEP functions in 23/7 operation mode.

At present, the NBU works on introduction of standard ISO 20022 into interbank settlements, establishment and publishing by the SEP participants of the respective project documentation, development of prototype of SEP new generation to implement it (code name SEP 4).

The priority task of SEP operation in 2020 was to secure stable performance of interbank settlements amid the Covid-19 pandemic.

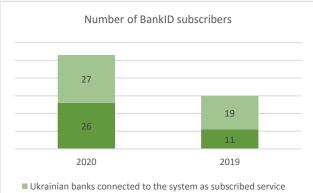
For information on the NBU activities during the pandemic, see Part 1 of this report.

The national system of electronic remote identification of individuals (hereinafter referred to the "NBU BankID System") put into operation in December 2016, has been further developed.

As of the end of 2020, the NBU **BankID System** had 53 subscribers (as of the end of 2019 – 30 subscribers), including:

26 banks of Ukraine working in the system as identifying subscribers

27 legal entities connected to the system as subscribed service providers, including Ministry of Digital Transformation of Ukraine with DIIA application.



providers

Ukrainian banks connected to the system as subscribed identifiers

In Q4 2020, over 3 million successful electronic remote identifications were preformed using the NBU BankID Sysytem.

On 1 July 2020 a commercial model of the NBU BankID System was launched.

In 2018, **the NBU Credit Register** (Credit Register) was introduced to analyze financial system conditions and ensure financial stability. Since 2019 the Credit Register is also used for the information support of the credit risk assessment by banks.

Since the start of its operation, the software on receipt of information on exposures processed the information on more than 7.1 million credit agreements (including 0.6 million in the Credit Register) that were concluded with appr. 2 million individuals (including 0.3 million in the Credit Register) and 0.2 million of legal entities (including almost 0.02 million in the Credit Register).

As of the end of 2020 the information on over 170,000 effective credit agreements concluded with almost 58,000 customers is stored in the Credit Register data base (including 24,677 legal entities and 33,196 individuals).

To ensure the regulator's openness and transparency, a system for publication on information in a form of open data (**OpenData**) was developed and introduced for unrestricted and free access to the qualitative, prompt, and complete statistical information through API OpenData of the NBU. The open data are allowed for further free use and dissemination according to Article 101 of the Law of Ukraine *On Access to Public Information*.

The NBU's system of banking and financial transactions (**NBU SAP**) is continually developed and improved.

In recent years the NBU SAP system based on SAP systems, was transferred to a new technology platform, SAP S/4HANA, for which a range of preliminary works were done, certain processes optimized, in particular, a transfer to a new budget.

The NBU SAP was set for the Remote Work task implementation based on personal cabinet SAP FIORI. It allowed to organize promptly the opportunity for remote work of the NBU SAP users under quarantine restrictions due to COVID-19 pandemic and ensure the NBU business continuity during quarantine.

In 2020, the NBU developed new software built on cuttingedge computerization devices, including:

 in compliance with requirements of the Law of Ukraine On Currency and Currency Operations for control of temporary limitations on volumes of certain currency operations on transfer of foreign currency and/or hryvnias (abroad Ukraine or to certain types of nonresident accounts in Ukraine) the information system Currency Operations Limits was introduced.

- to improve the efficiency and promptness of the process of the NBU foreign exchange reserves management the System on Automation of Operations with the NBU Foreign Exchange Reserves was developed and implemented
- such systemically important information resources as CCAS, SAMPI, ABS BARS Millennium, etc., were further developed.

The NBU mobile applications are developed and continually improved. Thus, in May 2020 a new mobile app UAPassportReader foridentification of ID passports was introduced.

The NBU IT infrastructure is continually developed and improved using he best world practices in IT infrastructure area.

#### In 2020:

- modern systems of virtualization of server resources, networks, disc systems were introduced
- data storage network San was upgraded
- network infrastructure equipment was upgraded.

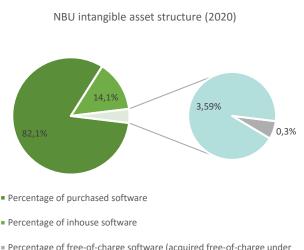
At present, new modern equipment for building the softwaredefined network of data processing centers installed and transfer to its use started. It should ensure the up-to-date level of network infrastructure for DPCs in accordance with the best world practices.

A centralized system of printing management SafeQ Y-Soft was implemented resulting in reduction of printing equipment number and expendables quantity.

The uninterrupted functioning of the NBU information resources is ensured continually being the basis for the NBU business continuity and functions fulfilment.

The NBU conducts the procedures of Business Impact Analysis (BIA) to define its critical processes and resources, develops, updates, and regularly tests the disaster recovery plans (DRP), takes measures to identify the operational risks and mitigate their impact on the NBU information systems, improves the internal control procedures.

The NBU information systems continuity is also maintained due to continual user support by Omnitracker system which is developed and improved by covering more aspects of assisting the NBU employees' activities. The NBU ensures timely (prompt) and qualitative servicing of employees in cases requiring the interference of IT specialists in all premises of the NBU, including different regions of Ukraine. Totally, as of 31 December 2020, 376 recognized intangible assets in a form of software are accounted at the NBU (including 320 acquired assets, 55 of own development, 1 - free of charge), and 14 unrecognized intangible assets (with term of use up to 1 year):



- Percentage of free-of-charge software (acquired free-of-charge under agreement)
- Percentage of software with up to one-year use (undetermined intangible assets)

When necessary, the software is written-off and/or entered into effect.

#### Information Security and Cyber Defense in Banks

Regardless of the increasing number and variety of cyber threats, due to introducing cutting-edge security technologies, effective use of security suites and systems, improving information sharing mechanisms on cyber attacks and incidents, the NBU ensured timely detection, analysis, and effective response to cyber attacks in 2020.

In 2020, the Cybersecurity Center of the National Bank of Ukraine continued increasing its potential in ensuring cyber security. The major focus was on advancing capacities of the Cyber Security Incidents Response Team of the National Bank of Ukraine (CSIRT-NBU) to detect, respond, and neutralize cyber attacks and incidents, as well as increase sources of information on current cyber attacks.

In order to improve information sharing instruments on current cyber threats and respective indicators, CSIRT-NBU has established a information sharing platform on cyber threats, the Malware Information Sharing Platform & Threat Sharing (MISP). This platform enables users to receive quickly information on current cyber threats and respective indicators. MISP accumulates information provided by CSIRT-NBU, similar platforms, the Cyber Security Situation Centre of the Security Service of Ukraine, and the National Coordination Center for Cybersecurity of the National Security and Defense Council of Ukraine.

In 2020, CSIRT-NBU examined 2,500 samples of malware, informed Ukrainian banks on detected cybersecurity incidents and reported attempted cyberattacks.

CSIRT-NBU continues to cooperate with the national cyber security agencies of Ukraine, other states and cyber security companies. Furthermore, international cooperation in cyber security continues.

For the purpose of expanding the scope of international cooperation on cyber security and defense, in 2020, a Memorandum was signed by the National Security and Defense Council of Ukraine and the US Department of Treasury. This document covers assistance for the NBU from the leading US institutions:

- providing cyber security of Ukraine's banking and financial sector
- developing of the Cybersecurity Center and CSIRT-NBU
- improving instruments of response and contraction, sharing and distributing information on current cyber threats.

Also, in 2020 for the purpose of performing the authorities prescribed by the Law of Ukraine *On the National Bank of Ukraine*, the critical infrastructure entities and the critical information infrastructure entities were defined in the banking system of Ukraine.

In 2020, the information cryptographic protection system of the NBU was upgraded, resilience and fault tolerance were advanced of the system for collecting and storing data of electronic fiscal device, a high level of data security was ensured by encryption means and affixing an qualified electronic signature or a qualified electronic seal of a bank for customers serviced through BankID of the NBU.

Evaluation of the current security of information network resources and its capability to withstand external and internal cyber threats according to findings of the external audit of information security showed that the NBU ensured an effective and targeted security in the information infrastructure of the NBU for quality and timely performance of functions prescribed by the Law of Ukraine *On the National Bank of Ukraine*.

The NBU continued efforts intended for payment market participants to improve the effectiveness of approving documents. Including for streamlining the operation conditions and procedure with regards to protecting data, the NBU has drafted a range of recommendations and identified standard comments posted on NBU official website.

In 2020, as part of the SPLIT project, a survey was commenced on information and cyber security among nonbank financial institutions. The survey findings will assess how providers of nonbank financial services store and protect user information.

Furthermore, the NBU took care to spread electronic trust services in the banking system, expanded the range of remote customer services, ensured security, quality, convenience and expediency of customer banking. In 2020, three providers of electronic trust services of the banking system were awarded the status of qualified service provides by the Certification Center: the NBU, UKRSIBBANK JSC, and Credit Agricole Bank PJSC. The Certification Center has generated for the abovementioned public key certificates:

- six certificates using the DSTU-4145 state electronic signature algorithm
- two certificates using the ECDSA international electronic signature algorithm
- two certificates using the electronic signature international electronic signature algorithm.

The NBU has made yet another step towards paperless technologies in the Ukrainian banking system and improved conditions for applying electronic signature and electronic seal. Respective provisions are set out in the revised Regulation regarding the application electronic signature in the Ukrainian banking system. To improve banking in the view of current cyber threats, a regulation was drafted on control of bank compliance with legal requirements to information security, cyber security, and electronic trust services.

According to the World Economic Forum, in 2020 the cyber attacks risk ranked eighth by impact and entered TOP-10 risks by likelihood. Therefore, enhanced control over banks' cyber- and information security measures, a new type of control in the templates for onsite inspections and offsite supervision of banks, and self-assessment of information and cyber security by banks will improve banks' capabilities to resist current cyberthreats. Besides, the regulator will be able to assess:

- information security system efficiency
- integrity of bank's compliance with NBU's regulations on information security and cyber security
- bank's management of information security risks and cyberrisks.

To alleviate the regulatory load on banks during the pandemic restrictions, the scheduled onsite inspections were suspended, including inspection of the information and cyber security. Instead, the NBU paid additional attention to other forms of control and advisory and methodological assistance of banks on ensuring information security, for example, for the time of remote work of employees favoring banks' adjustment to operating during the quarantine and inherent risks.

#### 4.2.5. Social and Reputational Resources

#### Labor Safety

In 2020, the NBU adopted a series of measures to create and maintain safe working conditions.

#### Expenses on labor safety of the NBU

	2020	2019
		(UAH thousand)
Labor safety measures	394	104
Work clothes, footwear	378	26
Mandatory and periodic medical examination	316	317
Compulsory traffic accident insurance	5	7
Purchase of medical kits	2,135	4

#### A number of labor safety trainings were held in 2019-2020:

	20	)20	20	19
	Number of events	Number of attendees	Number of events	Number of attendees
Civil protection	-	-	11	25
Labor safety	9	126	17	107
Fire safety (remote training)	1	4	3	247
Remote training in labor safety (internal)	10	1,459	-	561
Total	20	1,589	31	940

#### Activities of the Corporate Nonstate Pension Fund

As of 31 December 2020, 12,694 persons are members of the Fund (12,583 persons as of 31 December 2019), including 3,579 persons receiving pension benefits for a predetermined period (3,601 persons as of 31 December 2019). The carrying value of the Fund's assets amounted to UAH 1,606 million as of 31 December 2020 (1,490 million as of 31 December 2019). The founder's contribution to the Fund amounted to UAH 44 million in 2020 (UAH 42 million in 2019).

#### **Voluntary Health Insurance**

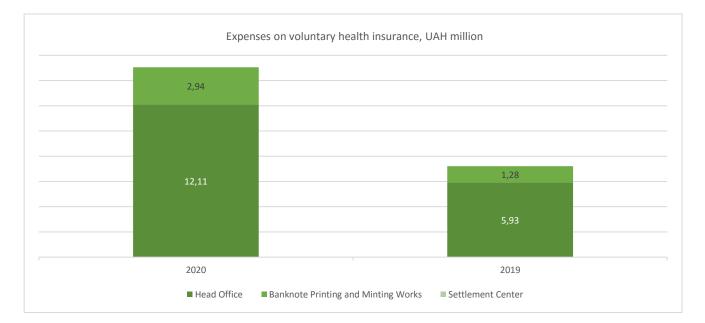
The number of insured persons amounted to 3,544 in 2020,

including 2,850 employees of the NBU Head Office and 694 employees of the Banknote Printing and Minting Works. In 2019, the number of insured persons was 3,077, including 2,539 employees of the NBU Head Office and 538 employees of the Banknote Printing and Minting Works.

In 2020, the expenses for voluntary health insurance totaled UAH 15.05 million, including UAH 12.11 million on the NBU Head Office and UAH 2.94 million on the Banknote Printing and Minting Works (in 2019, the respective figures were UAH 7.21 million, UAH 5.93 million and UAH 1.28 million).

The NBU's Settlement Center is not covered by the voluntary health insurance program.

The expenses of the National Bank for financial assistance and compensation for 2020 amounted to UAH 5.37 million.



#### Operation of the Primary Labor Union Organization of the NBU

In 2019-2020 the NBU's Labor Union supported the following activities:

	2020	2019
Summer rest and recreation (including abroad) by union members with families, number of the Labor Union members	207	559
Trips with families within Ukraine, number of NBU employees	78	461
Weekend tours abroad for employees with families, number of NBU employees	-	391
Nonrepayable financial aid	1	-
Stay in children summer camps, number of children of NBU employees	23	236
Fitness club membership, number of NBU employees	122	156
Cultural events and entertainment for NBU staff	2	4
Gift certificates for the Labor Union members, pcs	1660	1500
Number of employees that joined the Labor Union during the year	177	236

#### Financial Literacy

Due to the new challenges brought by the global COVID-19 pandemic, the NBU targeted its efforts at raising people's financial literacy using new remote operation and communication tools. The information campaign *Stay at home - pay/buy online,* launched by the NBU to prevent the spread of coronavirus disease, encouraged Ukrainians to use remote banking services and avoid visiting the banks in person. Three out of eight videos created for the campaign received the social ad status and were aired on television. The campaign is estimated to have reached 2.5 million Ukrainians.

GoodbyeToFraud information campaign was launched in response to the growing card fraud during the lockdown and rapid transition to online payments. To ensure the customers safety, the NBU invited more than 60 partners to join their efforts and inform Ukrainians about the safety rules for cashless and online payments. More than 50 million contacts were made during the six months campaign. The NBU's informational days in the regions also known as the Economic Express events were held in two cities (Dnipro and Cherkasy). 847 attendees included young people, media and business representatives, participants of the nonbank financial market. The key topics discussed during the Economic Express event were protection of the rights of consumers of financial services, financial literacy, tasks of a central bank, monetary policy and FX liberalization.

In 2020, the NBU organized the second student championship Monetary Policy: NBU University Challenge 2020. Over 170 persons from 13 regions of Ukraine and the city of Kyiv took part in the competition. Online format of the event allowed to cover the broad audience from different regions of Ukraine: 4 new regions and 13 new teams joined the event. The winners and finalists of the competition were invited to join the internship programs at the NBU.

As a co-organizer of Ukraine Economy Week, the NBU held a three-day lecture course featuring the speakers of the Annual Research Conference on *Labor Market and Monetary*  *Policy* jointly organized by the NBU and Narodowy Bank Polski. More than 370 attendees of the event represented 76 educational institutions and 18 regions of Ukraine. The best students from different regions of Ukraine were also invited to join a networking session with the speakers (Inspirational Breakfast).

Under the quarantine restrictions, the NBU Money Museum received 2,479 visitors. Ten new guided tours and lectures **4.2.6. Natural resources** 

The NBU's up-to-date strategic priorities for the NBU's sustainable development in the area of preserving environment include:

- ensuring compliance with the current statutory requirements on environmental management
- an inventory of all sources of air pollution according to permissions, and taxes on permitted emissions of pollutants paid
- concluding agreements on collecting, transporting, and handing waste over for further recycling to a company that holds a license for this type of activity
- maintaining and creating more green space; keeping the maintained territories clean
- maintaining vehicles in a proper state to reduce emissions of exhaust fumes
- upgrading the lighting systems, in particular, mitigation of adverse impact to environment and unnecessariness of disposal of hazard Class I fluorescent lamps
- implementing an electronic document flow system in order to significantly reduce the amount of domestic (office) waste and stationery expenses (paper, plastic, metal scrap, mixed waste, etc.)

(including four webinars) were added to the Museum's program. The Museum also took 416 visitors on the walking tours to celebrate the 115th anniversary of the NBU building. Together with its partners the NBU shares the history of Ukrainian central banking though the various channels: launching an art train in Kyiv subway, recording a radio podcast about the NBU Head Office building and holding an inclusive drawing contest for children.

- arranging water supplies and sewerage under contracts with specialized organizations. Monthly monitoring of waste water quality. The measures are taken to reduce the concentration of detergents and hazardous substances in waste water. Equipping the industrial sites with own treatment facilities
- developing the NBU initiative "I am for responsible consumption" on sorting of waste, participating in campaigns "Make Ukraine clean!", purchasing coffee into own cups, installation of containers for collection and further plastic bottles handing over.

The NBU and its employees care on preserving the environment.

Thus, the collection and handing over of recyclables was organized at the NBU premises. A pilot project on collection of plastic PET bottles in the NBU buildings was launched. A transfer to electronic document flow is carried out that allowed to reduce the use of office paper by more than 26% in comparison with the previous year.

	2	2020		2019
	Weight, kg	Weight, kg Amount, UAH thousand		Amount, UAH thousand
Waste paper for recycling	114,620	171.93	47,178	90.3
PET containers (plastic bottles)	390	2.33	590	3.5
Mixed polyethylene waste (unsorted)	6,300	12.6	13,380	19.7
Total		186.86		113.5

The NBU has become a part of the international practice of reducing the negative impact on the environment as regards raising corporate social responsibility. The concept involves the gradual replacement of the existing car fleet with more fuel-efficient cars in order to reduce the level of carbon dioxide (CO2) emissions into the atmosphere and optimize costs. To that end, the NBU has begun using three electric cars Hyundai IONIQ Electric since the beginning of 2019. They provide zero emissions into the atmosphere, have powerful dynamics, and meet modern requirements.

Throughout 2019 and 2020, the NBU's car fleet underwent optimization. In particular, cars with higher fuel consumption were withdrawn from use, while more economical ones, with less carbon dioxide emissions into the atmosphere, were put to use. This step reduced the consumption of fuel, oil, and lubricants by 2%: from almost 203 thousand liters in 2019 to 199 thousand liters in 2020 (in 2019: 32%: from almost 300 thousand liters in 2018 to 202 thousand liters in 2019).

At the end of 2020 6 new plug-in hybrid vehicles were purchased.

#### Water Consumption

The NBU's water resources management is based on efficient and rational use. To ensure the optimal water consumption by the institution both recirculating water systems and water reuse are used.

The NBU arranges water supplies and sewerage under contracts with specialized organizations; quarterly and monthly monitoring of waste water quality; and taking measures to reduce the concentration of detergents and hazardous substances in waste water. The NBU's industrial sites are equipped with own treatment facilities and sanitary laboratories.

The water withdrawal by the NBU in 2020 and 2019 was as follows:

		2020				2019			
	Head Office	Banknote Printing and Minting Works	Settleme nt Center	Total	Head Office	Banknote Printing and Minting Works	Settlement Center	Total	
Surface waters	-	224.046	-	224.046	-	-	-	-	
Others sources	-	18.781	-	18.781	-	366.719	-	366.719	
Municipal water supply	24.3	51.24	1.195	76.735	31.3	47.709	1.337	80.346	
Underground waters	-	63.485	-	63.485	-	57.899	-	57.899	
Total, thousand cub. m	24.3	357.352	1.195	383.047	31.3	472.327	1.337	504.964	
Number of staff, persons (FTE)	3407	1253	49	4708	3289	1229	48	4566	
Use of water per 1 person, cub.									
m	7.13	285.36	24.51	81.36	9.52	384.32	27.85	125.21	

Water consumption by all NBU premises and facilities reduced from 504.964 thousand cub. m in 2019 to 383.047 thousand cub. m in 2020, mainly due to decrease of water withdrawal by production facilities from other sources.

#### **Responsible Consumption**

Electric energy and natural gas consumption by the NBU in 2019-2020 was as follows:

		2020			2019	
	Volume, thousand units	Number of staff, persons	Consumption per 1 person, thousand units	Volume, thousand units	Number of staff, persons	Consumption per 1 person, thousand units
Electric energy consumption by the NBU for yea thousand kWh*	r,					
Head Office of the National Bank of Ukraine	8,241.663	3407	2.419	9,886.419	3289	3.006
Banknote Printing and Minting Works	28,488.000	1253	22.736	28,093.000	1229	22.858
Settlement Center	309.444	49	6.348	313.472	48	6.531
Total	36,039.107	4708	7.654	38,292.891	4566	8.387
Natural gas consumption by the NBU for year, thousand cub. m						
Head Office of the National Bank of Ukraine	378.958	3407	0.111	442.481	3289	0.135
Banknote Printing and Minting Works	3,624.330	1253	2.893	4,878.590	1229	3.970
Settlement Center	22.802	49	0.468	22.779	48	0.475
Total	4,026.09	4708	0.855	5,343.85	4566	1.170

Total electric energy and heat consumed in the reporting period decreased due to quarantine restrictions leading to remote work by a part of personnel.

Activities aimed at reducing energy consumption in the NBU administrative buildings continued throughout 2020 and include the following:

partial replacement of outdated lighting appliances and fittings with modern energy-saving LED panels and LED lamps, which lowered required disposal of mercury-containing lamps, being the waste of the hazard Class I
 installation of a modern and more energy efficient equipment during repairs and technical reequipment of the engineering infrastructure systems, which make it possible to save more energy

 an energy audit of separate NBU facilities was conducted (totally 33 facilities). The audit reports and recommendations will be used to develop and implement energy-saving measures aimed at improving the energy efficiency of premises. control system was established covering the entire manufacturing cycle:

- emissions and dumping from facilities undergo laboratory surveillance
- disposal sites are assessed for their impact on soil, ground waters and air
- air and underground waters at borders of the facility sanitary protection zones are sampled for quality control
- technical condition of environmental facilities and cleaning equipment is checked.

#### **Contaminating agents emissions**

 According to the requirements of environmental laws the NBU performs monitoring of environmental impact. A
 2020 the following times of all emissions were generated at the ND

In 2019-2020 the following types of air emissions were generated at the NBU:

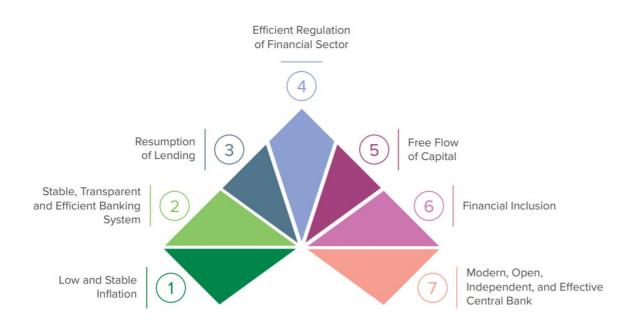
		2020		2019		
	Head Office	Banknote Printing and Minting Works	Settlement Center	Head Office	Banknote Printing and Minting Works	Settlement Center
						(tons)
Nitrogen oxide NO	1.445	6.103	0.0679	0.938	5.423	0.0676
Carbon oxide CO	1.66	7.671	0.0148	1.799	8.166	0.0147
Sulphur dioxide SO2	0.029	11.241	-	0.047	12.768	-
Carbon dioxide CO2	246.232	8,164.232	49.0451	398.411	10,274.262	48.9832
Substances in a form of suspending particulate matter undifferentiated by composition	0.94	10.379	-	0.093	10.592	-
Saturated hydrocarbons	0.094	0.186	0.0009	0.115	0.214	0.0009
Other contaminating agents	0.005	41.954	-	0.005	45.013	-
Total	249.468	8,240.832	49.1287	401.412	10,356.442	49.0664

The data of monitoring allow to define the level of production impact on environment and to take prompt managerial decisions aimed at prevention and mitigation of environmental impact.

## Part 5. Development Prospects

## 5.1. Implementation of the NBU's 2020 Action Plan

The NBU Strategy was implemented in seven development areas Six out of seven goals are external and aimed at meeting the needs of financial ecosystem participants. One of their prerequisites is high institutional capacity of the central bank, which determines the internal (seventh) goal on the list:



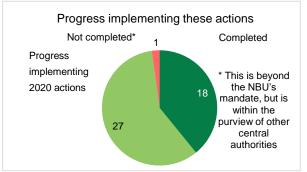
To meet the Strategic Goals, the NBU's 2020 Action Plan provided for 46 actions, including:

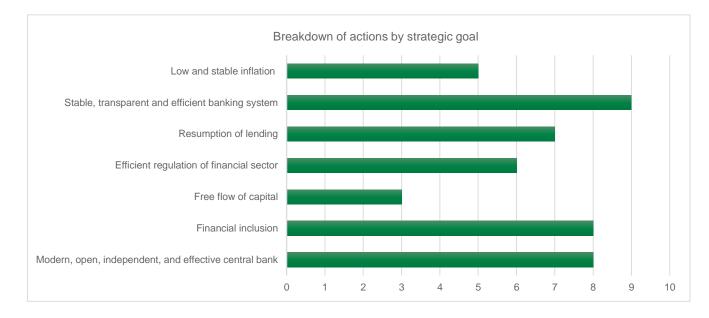
- five actions to achieve low and stable inflation
- nine actions to make the banking system stable, transparent, and effective
- seven actions to implement the lending resumption program
- six actions to implement an efficient regulation of financial sector
- three actions to implement free flow of capital
- eight actions to enhance financial inclusion
- eight actions to built a modern, open, independent, and effective central bank.

Progress implementing actions on the NBU's 2020 Action Plan:

- Low and stable inflation, 5 actions in total, 5 completed in 2020, work continues.
- Stable, transparent, and efficient banking system, 9 actions in total, 6 completed in 2020, work in progress, 3 completed.

- Resumption of lending, 7 actions in total, 5 completed in 2020, work in progress, 2 completed.
- Efficient regulation of financial sector, 6 actions in total, 3 completed in 2020, work continues, 3 completed.
- Free flow of capital, 3 actions in total, 2 completed in 2020, work in progress, 1 not completed (a more detailed analysis showed that this action was within the purview of other central authorities).
- Financial inclusion, 8 actions in total, 3 completed in 2020, work continues, 5 completed.
- Modern, open, independent, efficient central bank, 8 actions in total, 8 completed in 2020, work in progress.





# 5.2. Main achievements of the NBU in 2020 as part of implementing the NBU Strategy for 2018–2020 and the Strategy of Ukrainian Financial Sector Development until 2025

Among its achievements in 2020 in implementing both the NBU Strategy and the Strategy of Ukrainian Financial Sector Development until 2025, the NBU did as follows:

- cut the key policy rate to an all-time low of 6%
- maintained financial stability in Ukraine despite the economic fallout from the spread of COVID-19
- approved and started to implement the Strategy of Ukrainian Financial Sector Development until 2025 and the Fintech Development Strategy in Ukraine
- introduced an extended version of its BankID system (adding settlements between participants) to expand the capabilities for providing remote financial and nonfinancial services in Ukraine
- introduced the international IBAN standard for all bank accounts in Ukraine
- allowed banks to accept digital passports or international digital passports in the mobile app *Diya* during cash transactions
- joined the Sustainable Banking Network (SBN), which aims to improve environmental, social, and corporate governance in the banking sector
- simplified the processing of consumer protection appeals and, in November of 2020, launched an online form for submitting appeals/complaints/proposals to the NBU
- effective 1 September 2020, put in place requirements for banks to disclose comprehensive information about their services and their full prices for customers
- launched an online store selling coins
- stepped up efforts to cooperate with the government within the framework of implementing the Memorandum between the Cabinet of Ministers of Ukraine and the NBU in order to achieve sustainable economic growth and price stability
- facilitated efficient operation of state-owned banks, in particular by bringing their strategies into line with NBU recommendations

- introduced regulatory and legal changes to simplify lending promoting the adoption and implementation of legislative changes concerning the development of the secondary market for NPLs The share of NPLs in the banking system was reduced to 41%, while recovering for these loans was increased.
- The central bank prepared a draft law on payment systems (on implementing EU Directive PSD2) and had it registered by the Verkhovna Rada of Ukraine.
- The NBU introduced the "Split" law, designed a model for regulating the market for nonbank financial institutions by segment, drafted new laws On Financial Services and Rendering Financial Services, On Insurance, and On Credit Unions, launching an efficient system for the regulation and supervision of the nonbank financial sector.
- The NBU implemented an action plan on improving the financial literacy of the public after securing a relevant mandate last year.
- The central bank improved regulation and introduced requirements for banks and other financial institutions for disclosing information on financial services provided to consumers and protecting consumer rights in financial services.
- The NBU continued its development, including by improving technology and information infrastructure and ensuring a high level of process digitalization.
- introduced layering of monetary policy communications
- ensured that banking system profitability remained a healthy 20% amid the economic crisis
- developed a unified SREP methodology and drew up reports for the top 20 banks
- established requirements for banks' executive compensation policies
- increased the openness of state registers for banks, making almost 50% of all state registers available to banks

- launched interest rate swaps
- increased the limit on international remittances for individuals to EUR 50,000

## 5.3. Drafting the NBU's Strategy 2025

Back in 2019, the NBU approved the concept of a new strategic approach and decided to do a pilot project in two of its key functions as a central bank.

In line with the updated approach, the NBU in 2020 developed and approved internal legal documents that regulate and implement a new direction of the NBU's strategic development.

As part of its strategic analysis process, the NBU reviewed:

- global and Ukrainian trends and challenges that serve as = the basis for PESTLE analysis
- materials and surveys allowing the central bank to identify and structure the needs of its clients
- sectors of Ukraine's financial market that are regulated by the central bank

As part of its strategic planning process in 2020, the NBU drew up strategy documents, including the new NBU Strategy and functional strategies.

- Increased the ratio between cashless card-based transactions (P2P included) and all transactions
- implemented a new version of the SEP that is IBANbased and operates 23/7.

Functional strategies break down the NBU's general strategy into detailed strategic plans in selected areas. They are designed to develop the regulator's products that were identified and detailed during 2020.

In addition, the NBU defined the requirements for the structure and content of strategy documents and approved the format and requirements for strategy documents for use in the work of strategy teams during the development of the new NBU Strategy and functional strategies. Work on the development of these strategic documents will be completed in Q1 2021.

The NBU plans to continue to implement a new strategic approach based on the introduction of customer product logic in the regulator's processes in 2021-2024.

The full version of the Strategy of Ukrainian Financial Sector Development until 2025 is available on the NBU's official website at https://bank.gov.ua/en/news/all/strategiyarozvitku-finansovogo-sektoru-ukravini-do-2025-roku-7686

Approved for issue and signed on behalf of the Board of the National Bank of Ukraine on 7 April 2021.

Governor

Chief Accountant. **Director of Accounting Department** 

Kyrylo SHEVCHENKO



# Consolidated Financial Statements

for the Year Ended 31 December 2020



INDEPENDENT AUDITOR'S REPORT

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Translation from Ukrainian original

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## Independent auditor's report

To the Council and the Board of the National Bank of Ukraine

### Report on the audit of the consolidated financial statements

### Opinion

We have audited the consolidated financial statements of the National Bank of Ukraine and its subsidiary (further - the National Bank of Ukraine), which are presented on pages 1 to 74 and comprise the consolidated statement of financial position as at 31 December 2020, and the consolidated statement of profit or loss and other comprehensive income, and consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the National Bank of Ukraine as at 31 December 2020 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs), and comply with the requirements for the preparation of financial statements established by Law of Ukraine "On accounting and financial statements in Ukraine" No. 996-XIV.

#### Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the National Bank of Ukraine in accordance with the International Ethics Standards Board for Accountants' (IESBA) 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 Ukraine, 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 opinion.



# Key audit matters incorporating the most significant risks of material misstatements, including assessed risk of material misstatements due to fraud

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. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

### Key audit matter

How our audit addressed the key audit matter

## Valuation of debt securities at fair value through profit or loss

As at 31 December 2020, the foreign securities portfolio of the National Bank of Ukraine included debt securities with a total carrying value of UAH 671,778 million, which were measured at fair value through profit or loss and represented 50% of consolidated total assets (Note 7). These securities were classified under Level 1, 2 and 3 of the fair value hierarchy.

The debt securities classified as at fair value through profit or loss are valued based on quotes on an active market (Level 1 inputs) or, in case of adjustments, based on adjusted quoted prices (Level 2 inputs), or in absence of quotes on an active market, based on valuation models (Level 3) (Note 21). Judgements applied in respect of inputs may result in different classification within fair value hierarchy and fair value amounts.

We identified valuation of debt securities at fair value through profit or loss as a key audit matter because of judgments applied in fair value measurements as well as due to the significance of the assets to the consolidated financial statements and the impact of changes in valuation on the profit and loss. The audit procedures we performed to address valuation of debt securities at fair value through profit or loss as a key audit matter among others included:

(a) Obtaining understanding of the process of fair value assessments, key sources of inputs and assumptions used by the National Bank of Ukraine to value debt securities;
(b) Using our valuation specialists to assess the appropriateness of the methodology and the key underlying assumptions used by Management in fair value measurements of debt securities;

(c) Valuing the debt securities of the National Bank of Ukraine independently, using our internal valuation specialists, based on publicly available market data and comparing their valuation to the valuation of the National Bank of Ukraine;

(d) Testing of key inputs (discount rates, cash flows) and recalculating fair value amounts for a sample of Level 3 debt securities;

e) Analysing disclosures in respect of debt securities at fair value through profit or loss included in the notes to the consolidated financial statements.



Translation from Ukrainian original

### Key audit matter

### How our audit addressed the key audit matter

### Assessment of expected credit loss on debt securities at amortised cost

As at 31 December 2020, the domestic securities portfolio of the National Bank of Ukraine included debt securities at amortised cost with a total carrying value of UAH 334,128 million, which represented 25% of consolidated total assets (Note 9).

Assessment of expected credit losses on debt securities at amortised cost involves the use of judgments by Management (as disclosed Note 4 and Note 5) as to the assessment of probability of default and loss given default under a range of weighted macroeconomic scenarios; as well as identification of significant increase in credit risk since initial recognition or/and impairment of such debt securities.

Due to the significance of the balance of debt securities at amortised cost to the consolidated financial statements and judgmental nature of expected credit loss assessment, this matter was identified by us as a key audit matter. Among other, our audit procedures included obtaining an understanding and performing analysis of judgements applied by Management in measurement of expected credit losses on debt securities at amortised cost.

We assessed whether significant increase in credit risk or impairment in respect of such debt securities are present at the reporting date.

We also independently assessed under a range of probability weighted scenarios, with the help of our internal valuation specialists, amounts of expected credit losses on debt securities at amortised cost and compared to the assessment of the National Bank of Ukraine.

In addition, we analysed disclosures in respect of expected credit loss on debt securities at amortised cost included in the notes to the consolidated financial statements.

# Other information included in the National Bank of Ukraine Management Report and National Bank of Ukraine Annual Report for 2020

Other information comprises the information included in the National Bank of Ukraine Management Report, but does not include the consolidated financial statements and our auditor's report thereon, which we obtained prior to the date of this auditor's report, and the National Bank of Ukraine Annual Report for 2020, which is expected to be made available to us after that date. Management is responsible for the other information.

Our opinion on the consolidated financial statements does not cover the other information and we do not and 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 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.



If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

When we read the Annual Report, if we conclude that there is a material misstatement therein, we will communicate the matter to the Council of the National Bank of Ukraine.

# 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 IFRSs, 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 of Ukraine 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 of Ukraine or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the National Bank of Ukraine financial reporting process.

## Auditor's 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 auditor's 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 skepticism 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 of Ukraine 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 ability of the National Bank of Ukraine to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's 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 auditor's report. However, future events or conditions may cause the National Bank of Ukraine 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 of the National Bank of Ukraine and its subsidiary to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the National Bank of Ukraine and its subsidiary audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee of the National Bank of Ukraine's Council 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 the Audit Committee of the National Bank of Ukraine's Council with a statement that we have complied with relevant ethical requirements regarding independence, and to 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 the Audit Committee of the National Bank of Ukraine's Council, 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.

### Report on other legal and regulatory requirements

Pursuant to the requirements of Article 14 paragraph 4 of Law of Ukraine "On audit of financial statements and auditing activity" No. 2258-VIII (the "Law No. 2258-VIII") we provide the following information in our Independent Auditor's Report, which is required in addition to the requirements of International Standards on Auditing.

### Appointment of the auditor and period of engagement

We were first appointed as independent auditors to perform a statutory audit of the National Bank of Ukraine consolidated financial statements on 22 October 2019 by the Council of the National Bank of Ukraine for five years term. The period of total uninterrupted engagement for performing the statutory audit of the National Bank of Ukraine is two years.



Consistency of the independent auditor's report with the additional report to the audit committee

We confirm that our independent auditor's report is consistent with the additional report to the Audit Committee of the National Bank of Ukraine Council, which we issued on 31 March 2021 in accordance with Article 35 of Law No. 2258-VIII.

### Provision of non-audit services

We declare that no prohibited non-audit services referred to in Article 6 paragraph 4 of Law No. 2258-VIII were provided. In addition, there are no non-audit services which were provided by us to the National Bank of Ukraine.

The partner in charge of the audit resulting in this independent auditor's report is Studynska Y.S.

auditors and audit firms: 101256



Registration number in the Register of auditors and audit firms: 101250

Kyiv, Ukraine

7 April 2021

Ernst & Young Audit Services LLC is included in the Register of auditors and audit firms, registration number: 3516.

A member firm of Ernst & Young Global Limited

## Consolidated Statement of Financial Position

## as of 31 December 2020

	Notes	2020	2019
			(UAH millio
Assets			
Funds and deposits in foreign currency and investment metals	6	121,112	90,168
Foreign securities	7	671,778	504,979
SDR holdings	8.1	128	234
Monetary gold		42,014	28,223
Domestic securities	9	335,401	347,191
Loans to banks and other borrowers	10	66,930	13,843
Domestic public debt		1,635	1,727
IMF quota contributions	8.2	81,927	65,894
Property and equipment, and intangible assets	30	4,190	4,386
Other assets	11, 31	6,459	4,188
Total assets		1,331,574	1,060,833
Liabilities			
Banknotes and coins in circulation		558,694	425,256
Accounts of banks	12	50,017	78,444
Accounts of government and other institutions	13	70,664	38,982
Liabilities on profit distribution to the State Budget of Ukraine	29	24,434	42,722
Certificates of deposit issued by the NBU	14	163,485	151,932
Borrowings received		2,827	2,369
Liabilities to the IMF, apart from IMF quota contributions	8.3	193,471	171,059
Liabilities to the IMF in respect of quota contributions	8.3	81,917	65,886
Other liabilities	15, 32	1,095	810
Total liabilities		1,146,604	977,460
Equity			
Statutory capital	28	100	100
General reserves	28	67,734	51,439
Revaluation reserves for assets and liabilities	28	117,092	31,790
Total equity		184,926	83,329
Noncontrolling interest		44	44
Total capital		184,970	83 <mark>,</mark> 373
Total equity and liabilities		1,331,574	1,060,833

Approved for issue and signed on behalf of the Board of the National Bank of Ukraine on 07 April 2021.

Governor

Chief Accountant, Director of Accounting Department



Bohdan LUKASEVYCH

Kyrylo SHEVCHENKO

Notes on pages 5 through 74 are an integral part of these consolidated financial statements.

## Consolidated Statement of Profit or Loss and Other Comprehensive Income

for 2020

	Notes	2020	2019
			(UAH million
Interest income	17	31,225	36,702
Interest expenses	17	(15,901)	(16,353
Net interest income before income from reversal of impairment		15,324	20,34
Income from reversal of impairment on interest bearing financial assets	20	212	1,66
Net interest income after income from reversal of impairment		15,536	22,01
Fee and commission income		441	28
Fee and commission expense		(217)	(31
Net fee and commission income		224	25
Results from transactions with financial assets and liabilities in foreign currency and monetary gold Gains or losses on operations with financial instruments measured at fair	18	95,144	(43,441
value through profit or loss	19	18,013	13,43
Other income	33	719	1,028
Total net income/(expenses)		129,636	(6,713
Staff costs	34	(2,049)	(1,769
Costs related to the production of banknotes, coins, souvenirs, and other products		(1,167)	(1,146
Administrative and other expenses Expenses on provisions for probable contingencies and accrual of other	35	(1,375)	(1,372
liabilities		(92)	(119
Losses from impairment of other assets	20	(3)	(181
Income/(loss) before tax		124,950	(11,300
Income tax expense of subsidiary		(1)	(7
Profit/(loss) for the year Other comprehensive income not to be reclassified subsequently to profit or loss:		124,949	(11,307
Revaluation of investment metals		1,088	14
Other comprehensive income for the year		1,088	14
Total comprehensive income/(expenses) for the year		126,037	(11,164
Profit/(loss) for the year attributable to:			
the National Bank of Ukraine		124,949	(11,309
Noncontrolling interest		÷	
		124,949	(11,307
Comprehensive income/(expenses) attributable to:			
the National Bank of Ukraine		126,037	(11,160
Noncontrolling interest			
		126,037	(11,164

Approved for issue and signed on behalf of the Board of the National Bank of Ukraine on 07 April 2021.

Governor

Chief Accountant, Director of Accounting Department

Director Financial Controlling Department Englis

Kyrylo SHEVCHENKO

Bohdan LUKASEVYCH

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Notes on pages 5 through 74 are an integral part of these consolidated financial statements.

## Consolidated Statement of Changes in Equity

for 2020

	Notes	Statutory capital	General reserves	Revaluation reserve for assets and liabilities	Total equity	Noncontrolli ng interest	Total equit
						(	UAH million)
Balance as of 1 January 2019		100	56,091	81,274	137,465	42	137,507
Total comprehensive income for 2019		-	(11,309)	143	(11,166)	2	(11,164)
Result on transfer of assets	30	-	(248)	-	(248)	( <del>1</del> )	(248)
Realized result on revaluation of investment metals sold	29	-75	173	(173)	-	-24	12
Realized result on revaluation of securities disposed and derivatives	29	-	1,057	(1,057)	-	-	5 <del></del>
Allocation of unrealized result on revaluation of securities and derivatives to revaluation reserve	29	×	(4,677)	4,677	.75		. <del></del>
Compensation of unrealized losses on revaluation of financial assets and liabilities in foreign currency and monetary gold from revaluation reserve	29	-	53,074	(53,074)		æ	-
Portion of 2019 profit subject to distribution and transfer to the State Budget of Ukraine	29	-	(42,722)	-	(42,722)	-	(42,722)
Balance as of 31 December 2019		100	51,439	31,790	83,329	44	83,377
Total comprehensive income for 2020		*	124,949	1,088	126,037		126,033
Result on transfer of assets	30		(6)	-	(6)	3 <b>5</b> 1	(6)
Realized result on revaluation of investment metals sold	29		364	(364)	2		12
Realized result on revaluation of securities disposed and derivatives	29	-	2,789	(2,789)	-	-	-
Allocation of unrealized result on revaluation of securities and derivatives to revaluation reserve	29		(7,535)	7,535	5		-
Allocation of unrealized gain from revaluation of assets and liabilities in foreign currency and monetary gold to revaluation reserve	29	-	(79,832)	79,832	-	-	-
Portion of 2020 profit subject to distribution and transfer to the State Budget of Ukraine	29		(24,434)	<b>5</b> 0	(24,434)	-	(24,434)
Balance as of 31 December 2020		100	67,734	117,092	184,926	44	184,970

Approved for issue and signed on behalf of the Board of the National Bank of Ukraine on 07 April 2021.

Governor

Chief Accountant, Director of Accounting Department By and these per

Kyrylo SHEVCHENKO

Bohdan LUKASEVYCH

Notes on pages 5 through 74 are an integral part of these consolidated financial statements.

## Consolidated Statement of Cash Flows

for 2020

	Notes	2020	201
			(UAH millior
Operating activities			
Interest received		29,141	40,00
Fees and commissions received		441	28
Other income		852	1,85
Interest paid		(16,152)	(16,020
Fees and commissions paid		(217)	(46
Other expenses		(3,833)	(4,862
Taxes, duties, and charges paid		(501)	(403
Transfers to the state budget of Ukraine	29	(42,722)	(64,898
(Increase)/Decrease in loans to banks and other borrowers		(52,489)	10,33
Domestic public debt repaid		132	13
(Decrease)/increase in accounts of banks on demand		(29,557)	40,05
Increase in accounts of government and other institutions		26,344	26,70
Decrease/(increase) in other assets		1,869	(1,32)
Decrease in other liabilities		(77)	(963
Other cash flows		83	(908
Net cash flows from operating activities		(86,686)	29,94
Investing activities			
Increase in term deposits placed		(2,703)	
Net increase in foreign securities		(39,972)	(128,41
Purchase of monetary gold		(57)	(128
Repayment of domestic securities		12,500	11,02
Acquisition of property and equipment, and intangible assets		(249)	(28
Sale of property and equipment, and intangible assets		10	7
Net cash flows from investment activities		(30,471)	(117,72)
Financing activities			
Banknotes and coins issue in circulation	16	133,438	24,92
Repayment of liabilities to the IMF	16	(17,456)	(15,438
Term deposits deposited	16	<del></del>	(4)
Certificates of deposit issued by the NBU	16	11,636	90,02
Net cash flows from financial activities		127,618	99,46
Effect of changes in exchange rate		18,330	(38,582
Net change in cash and cash equivalents		28,791	(26,89
Cash and cash equivalents at the beginning of the reporting period		89,619	116,51
Cash and cash equivalents at the end of the reporting year	16	118,410	89,61

Approved for issue and signed on behalf of the Board of the National Bank of Ukraine on 07 April 2021.

Governor

Chief Accountant,

Encard

Kyrylo SHEVCHENKO

Bohdan LUKASEVYCH

Notes on pages 5 through 74 are an integral part of these consolidated financial statements.

**Director of Accounting Department** 

## Notes to the Consolidated Financial Statements Section I. Basis of preparation of financial statements

## 1. Principal Activities

The National Bank of Ukraine (the NBU) is Ukraine's central bank. Its operations are governed by Ukraine's Constitution, Ukraine's Law *On the National Bank of Ukraine*, as well as other Ukrainian laws. In accordance with Ukrainian legislation, the main function of the NBU is safeguarding the stability of the Ukrainian national currency. In performing its main function, the NBU is guided by the priority of achieving and maintaining price stability in the country. The NBU facilitates the stability of the banking system and sustainable economic growth, and supports the economic policies of the Cabinet of Ministers of Ukraine, provided that these do not prevent the NBU from carrying out its primary function of maintaining price stability.

The NBU does not aim to earn profits. The NBU's financial performance and the structure of its assets, liabilities, and capital are determined by the NBU's mandate as a special central authority.

Under the Law of Ukraine *On the National Bank of Ukraine*, the NBU performs the following main functions:

in accordance with the Monetary Policy Guidelines developed by the NBU Council, identifies and pursues a monetary policy

issues the domestic currency of Ukraine and organizes its circulation

ensures the accumulation and storage of international (gold and FX) reserves and makes transactions with these reserves and investment metals

is the lender of last resort for banks and organizes the refinancing system

performs banking regulation and supervision on an individual and consolidated basis

represents Ukraine's interests in the central banks of other countries, international banks, and other credit institutions where cooperation takes place at the level of central banks

carries out currency regulation as per the mandate specified by a special law, determines the procedure for making FX transactions, organizes and carries out currency supervision of banks and other financial institutions that have been licensed by the NBU to make FX transactions

organizes and carries out the collection and transportation of currency valuables, licenses legal entities to provide cash collection services to banks, and suspends, renews, and revokes these licenses determines the procedure for the functioning of the banking system of Ukraine in the event of martial law or a special period, carries out the mobilization training of the NBU system

protects the rights of consumers of financial services provided by banks and other financial institutions that have the right to render certain financial services and that are regulated and supervised by the NBU

organizes work and implements measures to increase the level of financial literacy of the public

performs other functions in finance within the mandate defined by the Law of Ukraine *On the National Bank of Ukraine*.

Under the Law of Ukraine *On the National Bank of Ukraine*, the NBU issues loans to banks to maintain liquidity, buys and sells securities, currency assets, and precious metals in the open market, sells commemorative coins made out of precious and nonprecious metals in the domestic and foreign markets, performs public debt servicing transactions related to the placement of, redemption of, and payment of income on government securities, maintains accounts of the State Treasury Service of Ukraine and those of international organizations, and performs other transactions necessary to ensure the pursuit of its mandate. The NBU also acts as a depository of government securities of Ukraine.

The NBU's authorized capital is the property of the state.

As of 31 December 2020 and 2019, the NBU's structure comprised the Head Office and the Banknote Printing and Minting Works, the NBU's standalone unit. These units operate exclusively within the scope of the NBU's tasks and functions, as defined by Ukraine's Law *On the National Bank of Ukraine*.

The NBU's subsidiary is the Public Joint Stock Company «Settlement Center for Servicing Financial Market Agreements» (hereinafter the Settlement Center). The NBU's shareholding in the authorized capital of the Settlement Center was 83.55% as of 31 December 2020 (31 December 2019 – 83.55%).

As of 31 December 2020 and 2019, the authorized capital of the Settlement Center totaled UAH 206.7 million of ordinary registered shares with a face value of UAH 1,000 each.

The Settlement Center is the only institution that has a mandate to perform settlements of securities and other financial instrument agreements made on the stock exchange or over-the-counter, if the delivery against payment principle is used. The Settlement Center opens and maintains money accounts for stock market participants. It is also responsible for paying securities-related income and the face value of redeemed securities to their holders, as well as for making payments related to other corporate transactions by an issuer, including those related to securities that are placed and held outside Ukraine.

The NBU is the founder of the Corporate Nonstate Pension Fund (CNPF).

The NBU manages and stores the CNPF's assets.

The NBU has analyzed the existence of controls required for consolidation in accordance with IFRS 10 "Consolidated Financial Statements" with regard to the CNPF. The NBU is the founder of the CNPF, but does not bear its risks and is not entitled to variable results of its activities. Under IFRS 10, the NBU does not control the CNPF, and, therefore, CNPF has not been consolidated for the purpose of these consolidated financial statements. The NBU's investments in the associated company as of 31 December 2020 and 2019 were represented by investments in the authorized capital of the Public Joint Stock Company «National Depository of Ukraine» (hereinafter the National Depository).

The NBU, the National Securities and Stock Market Commission, and other stock market practitioners are shareholders of the National Depository. According to its charter, the National Depository conducts depositary recordkeeping, and maintains records of securities and issuers' corporate transactions on customers' securities accounts.

As of 31 December 2020 and 2019, the NBU owned 2,580 ordinary registered shares of the National Depository with a face value of UAH 10,000 each and UAH 25.8 million in total. As of 31 December 2020, the NBU's shareholding in the authorized capital of the National Depository was 25% (31 December 2019 – 25%).

Approval of the consolidated financial statements is within the responsibilities of the NBU Council.

## 2. Summary of Accounting Policies and Basis of Preparation

This section contains the NBU's accounting policy that relates to the financial statements as a whole. If an accounting policy can be applied to a particular note in these financial statements, the accounting policy and related disclosures are provided in the appropriate note.

The NBU's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (hereinafter IFRS) approved by the International Accounting Standards Board, and the Laws of Ukraine On the National Bank of Ukraine and On Accounting and Financial Reporting in Ukraine.

These consolidated financial statements have been prepared on the basis of the assumption that the NBU is a going concern and that it will continue to operate as going concern in the foreseeable future.

These consolidated financial statements have been prepared under the historical cost convention, except for financial assets measured at fair value through profit or loss and derivative financial instruments. The consolidated financial statements are presented in the national currency of Ukraine – the hryvnia – which is the functional currency and the presentation currency of the consolidated financial statements. The NBU's consolidated financial statements are prepared in millions of hryvnias.

#### **Basis of consolidation**

The consolidated financial statements comprise the financial statements of the NBU and its subsidiary as of 31 December 2020.

A subsidiary is a company controlled by the NBU. A company is considered to be under control if all of the following conditions are met:

- existing of rights to govern the relevant activities of the investee;
- exposure, or rights, to variable returns and risks from its involvement with the investee;
- ability to use its power over the investee to affect the NBU's results.

A subsidiary is fully consolidated starting from the date the NBU takes control over it (usually the date of acquisition), and consolidation is discontinued on the date that control is lost.

A change in the NBU's stake in a subsidiary without loss of control is recorded as an equity transaction. A subsidiary's losses are attributed to the noncontrolling interest, even if this results in the noncontrolling interest balance being negative.

If the NBU loses control of a subsidiary, it discontinues the recognition of the subsidiary's assets and liabilities (including related goodwill) and the carrying amount of the noncontrolling interest, recognizes the fair value of the consideration received, the fair value of the remaining

investment, and the profit or loss from the transaction, and reclassifies to profit or loss the share in the components previously recognized within other comprehensive income. In case of disposal of a subsidiary by transferring control to the state as represented by the Cabinet of Ministers of Ukraine or other authorities, the result of this transaction is reflected in equity.

The consolidation of a subsidiary's financial statements excludes all intragroup transactions balances, including the amount of income and expenses pertaining to transactions between subsidiaries. The NBU and its subsidiary apply a unified accounting policy in the preparation of consolidated financial statements. The financial statements of the subsidiary cover the same reporting period as the consolidated financial statements of the NBU itself.

#### Investments in associated company

An associated company is a company over which the NBU has significant influence. Significant influence means the power to participate in the making of financial and operating policy decisions of a company, but it does not mean control or joint control over those policies.

Investments in associated companies are accounted for using the equity method, taking into account recognized impairment, and are recorded as other assets. Subsequent changes in the carrying amount reflect changes in the NBU's share in the associate company's net assets since the acquisition. The NBU's share of the associated company's profit or loss since the date of investment, and the amount of recognized impairment of the investment are recognized in other income or expenses in the consolidated statement of profit or losses and other comprehensive income. The share of the NBU in other changes in the associated company's equity that have occurred since the investment was made is recognized in the consolidated statements of profit or loss and other comprehensive income and changes in equity. However, if the NBU's share in the losses of the associated company equals or exceeds share in the associated company, the NBU does not recognize further losses, except where it has an obligation to make payments to or on behalf of the associated company. Under the equity method, investments in associated companies are recorded until the last day of the month in which the investee does not meet the criteria of the associated company.

Information on introducing new and amended standards and interpretations of financial statements is provided in Note 38.

#### Change in presentation

At preparation of these consolidated financial statements, the NBU changed the format of its presentation in order to increase the relevance, clarity, and interconnectedness of information, specifically:

 Notes were grouped into sections, depending on the nature of the information disclosed and on whether the items of the financial statements related to financial or nonfinancial instruments.

- Information about significant policies, judgments, and estimates was transferred to relevant notes that contain information about relevant assets and liabilities. This emphasizes the relationship between the pieces of information provided in the notes.
- To accommodate user needs, a new note on Gains/(losses) from impairment of financial and nonfinancial assets was added. The presentation of information in the note "Certificates of deposit issued by the NBU" was improved.
- The title Consolidated Statement of Comprehensive Income was changed to Consolidated Statement of Profit or Loss and Other Comprehensive Income, while the content of the report was unchanged.

Presentation of comparative information for 2019 was changed in line with the presentation of 2020.

## Critical estimates and judgments in applying accounting principles

The NBU uses estimates, assumptions, and professional judgment that affect the amounts of assets and liabilities reported in its consolidated financial statements. Estimates and judgements are regularly revised and are based on NBU management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Major estimates and judgements are given in Notes 5, 30, 32, and 36.

## 3. Impact of Economic Conditions on the NBU's Financial Position and Results

#### Economic Developments

Real GDP fell by 4.0% yoy in 2020 (http://ukrstat.gov.ua). The main reason behind the decline in GDP was the quarantine introduced in Ukraine and worldwide in response to the spread of COVID-19. The labor market saw a sharp rise in unemployment accompanied by decreasing household income, which was only partially offset by the government's social support programs. The drop was the deepest in Q2 2020.

The spread of COVID-19 pandemic in Ukraine and across the globe, which started in early 2020, and quarantine restrictions implemented by the majority of governments caused a sharp decline in economic activity in most countries, including Ukraine. Economic activity recovered gradually as quarantine restrictions eased. However, the recovery was uneven due to persistently high incidence of COVID-19 and the reintroduction of stricter quarantine measures. Vaccination is reducing the risk of repeated lockdowns. However, it is slow and sporadic, which means there still is a possibility of local quarantines that will have negative consequences for economic activity.

The consolidated budget recorded a large deficit in 2020 (almost UAH 224 billion), produced by budgets of all levels. The deficit was financed mainly with debt, both domestic and foreign. Coupled with the hryvnia depreciation, this made the public and publicly guaranteed debt increase compared to the start of the year.

As soon as the strict lockdown ended, the economy of Ukraine started to recover rapidly in H2 as consumption grew on the back of higher wages, social spending from the budget, road infrastructure, and healthcare. On the other hand, businesses' investment activity remained sluggish due to uncertainty caused by the pandemic.

In 2020, the surplus of Ukraine's current account hit one of its record-high levels (USD 6.2 billion or 4.0% of GDP). Exports were more stable than imports (they declined by 2% and 14.2% respectively). On the other hand, there were outflows from the financial account (USD 4.2 billion) owing to large foreign debt repayments. As a result, over the year gross

international reserves reached USD 29.1 billion, which corresponds to five months of imports.

During most of 2020, inflation was below the  $5\% \pm 1$  pp target range against the backdrop of lower global energy prices and weaker demand at the time of the pandemic. Inflation accelerated late in the year, pushed by growing domestic consumer demand, high global commodity prices, and poorer harvests. As a result, inflation in December returned to the target range and reached its midpoint of 5.0%.

The NBU's monetary policy in 2020 was loose. In H1 2020, the central bank cut its key policy rate by 750 bp to an all-time low of 6%, and kept it at this level until the end of the year.

The banking system maintained a large liquidity surplus (which is defined as balances of banks' correspondent accounts and the NBU certificates of deposit). The daily average liquidity surplus increased markedly in 2020, mainly a result of growth in daily average balances of certificates of deposit (the principal amount reached UAH 129.6 billion). Daily average balances of banks' correspondent accounts remained almost unchanged at UAH 55.6 billion.

In June 2020, Moody's upgraded its Ukraine's credit rating to B3 from Caa1, which had not changed since the end of 2018. Standard & Poor's and Fitch confirmed their ratings for Ukraine at B in September 2020.

Ukraine remains affected by Russia's annexation of the Autonomous Republic of Crimea, the unresolved armed conflict in some areas of Luhansk and Donetsk oblasts as well as by complicated political and economic relations with Russia.

Economic and political factors and consequences of the spread of COVID-19 in Ukraine and across the globe may have a mixed effect on the NBU's performance and financial position. However, the degree of the effect cannot be estimated reliably for now. The NBU's management is closely monitoring the current developments and is taking necessary action in order to mitigate the effect of the negative factors.

## Section II.I. Financial Instruments

# 4. Accounting policy. Presentation of financial instruments by measurement categories

#### **Transactions with Financial Instruments**

The NBU classifies all financial assets into the categories that are at fair value through profit or loss and amortized cost depending on the models determined to manage financial assets and cash flows characteristics. The NBU does not classify any assets into the category at fair value through profit or loss in order to remove or reduce significantly accounting discrepancies.

Financial assets of the NBU are classified as follows:

## Funds and Deposits in Foreign Currency at Amortized Cost

Funds and deposits in foreign currency are recorded when the NBU advances foreign currency funds to counterparty banks within a model for management of financial assets with objective is to collect contractual cash flows. Those funds are not related to derivative financial instruments, not quoted in the market, and repayable on fixed or determinable dates.

#### Debt securities at amortized cost

This category includes the securities in respect of which both of the following conditions are met:

- Securities are held within the model for management of financial assets under which securities are held to collect contractual cash flows.
- Contractual terms prescribe cash flows on specified dates that are solely payments of securities' principal and interest on the principal amount outstanding.

Such securities include domestic government debt securities with fixed coupons and domestic government debt securities with coupon calculated as inflation index for the last 12 month plus a set margin (hereinafter referred to as "inflation indexed government bonds").

## Debt Securities Measured at Fair Value through Profit or Loss

The NBU manages a group of such financial instruments in accordance with a documented model for management of financial assets relates to other types of models than a model for management of financial assets with objective to collect cash flows and a model of management of financial assets with objective both to collect cash flows according to contractual (issue) terms and to sell those assets.

Also, this category includes the securities that do not meet the criteria of measurement at amortized cost or at fair value through other comprehensive income based on the analysis of contractual cash flows in respect of the financial assets which are not solely payments of principal and interest on the principal amount outstanding. The fair value of these securities is determined by reference to market quotations in the principal or most beneficial markets, if no quotations are available, based on the assessment model (Note 21).

Loans to Banks and Other Borrowers at Amortized Cost Loans to banks and other borrowers are recorded when the NBU lends money to counterparty banks or other borrowers of the model for financial assets management, whose objective is to collect contractual cash flows and the contractual cash flows represent solely payments of principal and interest on the principal amount outstanding.

#### **Domestic public debt**

Domestic public debt includes loans granted to the Government. Domestic public debt is reported under the model for management of financial assets with objective to collect contractual cash flows and which are solely the principal amount and interest on the principle amount outstanding. Domestic public debt is not secured and is recognized at amortized cost.

#### **Cash and Cash Equivalents**

For the purposes of reporting cash flows, cash and cash equivalents include cash in foreign currencies, SDR holdings, financial assets on demand, and deposits in foreign currencies maturing within three months from the origination date and which are available for use at short notice and are subject to insignificant risk of value fluctuations.

#### Financial Liabilities of the NBU are classified as follows:

- banknotes and coins in circulation. The amount of banknotes and coins in circulation is the nominal value of banknotes and coins (small change, circulating, commemorative, and bullion coins) that are legal tender issued to circulation by the NBU after introducing hryvnia in September 1996. Cash in domestic currency stored in the NBU's vaults and cash desks or transferred by the NBU to custody at authorized banks, is excluded from the amount of banknotes and coins in circulation
- accounts of banks. These liabilities are not derivative instruments
- accounts of government and other institutions are nonderivative liabilities to the government and other customers

certificates of deposit issued by the NBU

borrowings received.

#### **Derivative Financial Instruments**

Derivative financial instruments are represented by derivative securities, swaps, forwards, and futures contracts. Derivative financial instruments are measured at fair value through profit or loss. All derivatives are recorded as assets if their fair value is positive and as liabilities if the fair value is negative.

#### **Key Measurement Methods**

Financial assets and financial liabilities are initially recognized at fair value or at fair value including transaction costs, and are subsequently measured at fair value or amortized cost depending on their classification.

## Recognition and Measurement of Financial Instruments

Financial instruments are recognized as follows:

transactions with financial instruments are recorded in the consolidated statement of financial position at a settlement date, which is the date when the title to these assets is transferred to (from) the NBU, other than derivative financial instruments

debt securities, equity instruments, and other financial instruments measured at fair value through profit or loss are initially recorded at fair value as of the settlement date

foreign currency funds and deposits, debt securities at amortized cost, loans to banks and other borrowers, and all financial liabilities (safe for derivative financial instruments) are initially recorded at fair value as of transaction date plus transaction related costs

banknotes and coins in circulation are recognized as liabilities at nominal value after their disbursement to banks and NBU clients.

The best evidence of the fair value of a financial instrument at initial recognition is normally the transaction price (i.e. the fair value of the consideration given or received). If the NBU determines that the fair value at the transaction date differs from the transaction price, the instrument is accounted at the date of initial recognition as follows:

at the estimated value, which is required at initial recognition, if the fair value is evidenced by a quoted price in an active market for an identical asset or liability (i.e. a Level 1 input) or based on a valuation technique that uses only data from observable markets. The NBU recognizes the difference between the fair value as of the transaction date and the transaction price as profit or loss (except for transactions with the owner which are recognized within the NBU's equity)

in all other cases, at the estimated value, adjusted to defer the difference between the fair value as of the transaction date and the transaction price. After initial recognition, the NBU recognizes that deferred difference as a profit or loss only to the extent that it arises from a change in a factor (including time) that market participants would take into account when pricing the asset or liability.

Subsequent measurement of the NBU's financial instruments is as follows:

debt securities, equity instruments, other financial instruments measured at fair value through profit or loss, and derivative financial instruments are revalued after each change in their fair value, but at least as of the reporting date. Gains or losses from changes in fair value are recognized in financial results of the consolidated statement of profit or loss and other comprehensive income in the period in which they arise

foreign currency cash and deposits, debt securities at amortized cost, loans to banks and other borrowers, as well as the domestic public debt and other financial liabilities, other than derivatives, are measured at amortized cost using the effective interest rate method

banknotes and coins in circulation are accounted at nominal value and are not revalued subsequently.

The NBU's financial liabilities other than financial derivative instruments are presented at amortized cost.

As of 31 December 2020, financial assets were broken down into measurement categories as follows:

	Assets at fair value through profit or loss	Assets at amortized cost	Tota
			(UAH million
Financial assets			
Funds and deposits in foreign currency	8	118,331	118,33
Foreign securities	671,778	-	671,77
SDR holdings	_	128	12
Domestic securities	1,273	334,128	335,40
Loans to banks and other borrowers	-	66,930	66,93
Domestic public debt	-	1,635	1,63
IMF quota contributions	-	81,927	81,92
Other financial assets	46	1,269	1,3 <sup>-</sup>
Total financial assets	673,105	604,348	1,277,45

As of 31 December 2019, financial assets were broken down into measurement categories as follows:

	Assets measured at fair value through profit or loss	Assets at amortized cost	Total
			(UAH millior
Financial assets			
Funds and deposits in foreign currency	8	89,512	89,52
Foreign securities	504,979	-	504,97
SDR holdings	_	234	23
Domestic securities	987	346,204	347,1
Loans to banks and other borrowers	-	13,843	13,8
Domestic public debt	-	1,727	1,7
IMF quota contributions	-	65,894	65,8
Other financial assets	8	228	2
Total financial assets	505,982	517,642	1,023,6

#### Financial Assets Impairment Policy and Allowances for Expected Credit Losses Recognition

During estimation of impairment and assessment of expected credit losses for financial assets, the NBU is guided by requirements of IFRS 9: Financial Instruments.

The NBU defines credit loss as the difference between total cash flows payable by a counterparty/issuer/borrower under the agreement and total cash flows expected to be received by the NBU discounted by the effective interest rate. When determining future cash flows in order to calculate expected credit losses, all conditions of a financial instrument are taken into account during its life (e.g., options of early redemption, extension, early loan repayment, and other similar options). Cash flows that are taken into account include cash flows from selling collateral or other credit enhancements of a financial instrument which are the integral part of the agreement. Professional judgement/assumption is used to assess feasibility of making a reliable assessment of the expected life of a financial instrument.

Allowance for expected credit losses are made by allocation of the respective amount of changes in the allowance to expenses (as part of items "Gains/(losses) on reversal of impairment (impairment) gain/loss on interest-bearing financial assets" and "Gain/(losses) on reversal of impairment (impairment) on other assets").

Allowances for expected credit losses are made and released pursuant to decisions of the NBU Board at least once a month (at least once a quarter for accounts receivable and contract assets) as of the end of the last business day of the month/quarter. The NBU recognizes allowances for expected credit losses on financial assets (deposits granted, loans at amortized cost, debt securities at amortized cost, accounts receivable) and allowances for credit-related commitments.

The NBU reports its financial instruments as one of the following impairment stages:

Impairment Stage One (Stage 1): financial instruments with no significant increase in credit risk as of the reporting date since initial recognition Impairment Stage Two (Stage 2): financial instruments with a significant increase of credit risk at the reporting since initial recognition, but no objective evidence of impairment

Impairment Stage Three (Stage 3): financial instruments with the objective evidence of impairment as of the reporting date

Purchased or originated credit-impaired financial assets: financial assets with the objective evidence of impairment as of date of initial recognition.

As of the transaction date of financial assets, other than purchased or originated credit-impaired financial assets, are included to Impairment Stage One.

Depending on the impairment stage for financial assets, allowances for expected credit losses are created at an amount equal to expected credit losses:

- 12-month ECLs for the financial assets at Impairment Stage One
- full lifetime ECLs for the financial assets at Impairment Stages Two or Three.

Expected credit losses for 12 months are a part of lifetime credit losses which may arise if the borrower defaults within 12 months after the reporting date (or within a shorter period if expected lifetime of the financial instrument is less than 12 months).

Expected credit losses for 12 months reflect expected amounts of expected cash shortfalls over the full lifetime which may arise in case of a default within 12 months after the reporting date weighted by the probability of default (or the probability of a range of possible loan repayment scenarios) measured based on the borrower's cumulative probability of default within 12 months after the reporting date (or within the remaining lifetime).

Expected credit losses for the full lifetime of a financial instrument are expected credit losses for the full lifetime which may arise if the borrower defaults during the lifetime of a financial instrument.

Expected credit losses for the full lifetime reflect expected amounts of expected cash shortfalls over the full lifetime which may arise in case of a default over the full lifetime after the reporting date weighted by the probability of default (or the probability of a range of possible loan repayment scenarios) measured based on the borrower's cumulative probability of default over the full lifetime of a financial instrument that remains after the reporting date.

Purchased or originated credit-impaired financial assets are estimated at fair value with the subsequent recognition of interest income based on credit-adjusted effective interest rate.

After initial recognition, allowances for expected credit losses of purchased or originated credit-impaired financial assets are recognized or released only in case of changes in expected credit losses and recognized within profits or losses as gain or loss from impairment.

To determine the impairment stage at each reporting date for financial assets by individual instruments, credit risk is assessed on an individual basis in order to establish:

- a significant increase in credit risk since initial recognition
- objective evidence of impairment.

Significant increases in credit risk are assessed based on two types of information: quantitative and qualitative factors, taking into account, among other things, categories of internal borrower credit rating that takes account of the change in the level of credit risk as of the reporting date.

Objective evidence of impairment for financial assets includes information about the following loss events:

significant financial difficulties experienced by the borrower or the issuer

breach of contract by the borrower or breach of the issuance conditions by the securities issuer

possibility of bankruptcy or other financial reorganization of the borrower or the issuer

granting to the borrower or issuer concessions associated with financial difficulties of the borrower that the lender would not otherwise consider (such as a change in the interest rate or extension)

observable data indicating that there is a measurable decrease in the estimated future returns from a group of financial assets since the initial recognition of those assets.

Objective evidence of impairment are recognized at the level of the financial instrument. The financial-instrument-level approach envisages that if there is at least one attribute of an objective evidence of impairment at the level of the financial instrument, the financial instrument with the borrower and all financial instruments of this borrower are deemed to have objective evidence of impairment. An event of default is one of the attributes of the objective evidence of impairment.

For all asset groups the NBU defines a default as incapability or unwillingness of a counterparty/issuer/borrower to fulfill their financial obligations towards the NBU which leads to direct financial losses from materialization of credit risk. An event of default on obligations towards the NBU is recognized, in particular, for other past due financial assets with at least one payment past due for more than 90 calendar days as of the reporting date.

If no own historical data are available or historical data on losses are insufficient, other institutions' historical data on similar asset groups may be used. Professional judgement of the NBU's employees may also be used.

Own loss experience is adjusted on the basis of current information and forecast of the future economic situation in order to reflect the impact of current and forecast economic conditions that did not apply in the period of the available historical loss data and to exclude the impact of conditions of this historical period which were absent as of the reporting date.

When using own historical loss statistics to estimate future cash flows, such historical data are applied only to those groups of assets that are determined on the basis of principles similar to those used for the groups on which these historical loss data are based.

Information on the actual and forecast values of future economic conditions (macroeconomic indicators) is used to determine the probability of default taking into account the impact of future economic conditions, and when choosing discounts to be applied to the value of collateral depending on the stage of the economic cycle.

Therefore, the applied methods allow to use historical data on losses for a group of assets with similar credit risk characteristics and current data that reflect current conditions and forecasts of the future economic situation.

The NBU estimates its impairment losses on individual and collective basis.

Assessment on individual basis is conducted for financial assets that were found to show objective evidence of impairment, and assets that make up public and publicly guaranteed debt, or liabilities of state-owned enterprises and organizations (including state-owned banks and the Deposit Guarantee Fund).

Assessment on collective basis is conducted for financial instruments with common credit risk features (for example, deposits in foreign banks are grouped by credit ratings set by international rating companies like Fitch Ratings, Moody's, and Standard & Poor's; and loans issued to Ukrainian banks to support liquidity – according to ratings according to the NBU's internal methodology).

The NBU uses the following three approaches to calculate expected credit losses:

1) assessment on a collective basis (credit risk parameters), according to which the expected credit loss is the product of exposure at risk of default, the probability of default, and the level of losses in case of default, taking into account the forecast scenarios weighted by the probability

2) assessment on a collective basis (repayment scenarios) taking into account the unconditional probability of their occurrence, according to which the expected credit loss is the present value of the difference between the envisaged contractual cash flows payable to the NBU under loan agreements, discounted at the effective interest rate, and total cash flows that the NBU expects to receive under probable loan repayment scenarios, discounted at the effective interest rate

3) assessment on an individual basis (customized repayment scenario), according to which the expected credit loss is the present value of the difference between the envisaged contractual cash flows payable to the NBU under a loan agreement, discounted at the effective interest rate, and total cash flows that the NBU expects to receive under the customized loan repayment scenario, discounted at the effective interest rate.

Credit losses on insignificant accounts receivable and contract assets are assessed by a simplified method.

In the event the amount of expected credit losses decreases as a result of the events that evidence on the decrease in credit risk on the financial instrument, the amount of such allowance for financial instrument is reversed. The amount of decrease in expected credit losses is reported as profit or loss in the consolidated statement of profit or loss and other comprehensive income.

For banknotes and coins in cash stocks, cash handling offices, and ATMs the presence of which is unconfirmed and over which control is lost, are provisioned against cash losses. Such provisioning is recognized in profit or loss in the consolidated statement of profit or loss and other comprehensive income.

#### Written off Financial Assets

Irrecoverable financial assets are written off partially or completely against the created allowance for expected credit losses upon completion of all required procedures on the asset recoverable amount, when there are no reasonable expectations of recovering contractual cash flows.

#### Change in Classification

Securities may be reclassified – as an exception between categories (at amortized cost, at fair value through profit or loss, or at fair value through other comprehensive income) – if the model of financial assets management changes. Classification and measurement requirements related to the new category applied prospectively from the first day of the

reporting period after the changes to the model for financial asset management that led to reclassification were recognized.

## Changes (modification) of financial assets' terms and conditions

If terms and conditions under a financial asset change significantly, the NBU derecognizes such an asset and recognizes a new financial asset at fair value in profit or loss in the consolidated statement of profit or loss and other comprehensive income.

If the change in terms and conditions is not significant, then the gross carrying amount of those assets are adjusted. The adjustment amount is determined as a difference between the present value of new cash flows at the revised terms discounted at the original effective interest rate (or the current effective interest rate, if loans are granted at floating rates), and the gross carrying amount of the financial asset at the date of the terms' change and is recognized as income/expenses on the change (modification) of financial assets' terms and conditions in the consolidated statement of profit or loss and other comprehensive income.

#### **Repo Transactions**

Funds paid under the agreements for purchase and sale of securities with counterparty banks with a subsequent repurchase obligation (reverse repo) are recorded as loans to banks. The difference between the purchase and resale prices is treated as interest income recognized over the life of the repo agreements using the effective interest rate method.

Funds received under repo agreements are included in accounts of banks in the consolidated statement of financial position. The securities sold under repo agreements are retained as the assets of the NBU. The difference between the sale and repurchase prices is treated as interest expense and accrued over the life of the repo agreement using the effective interest rate method.

#### **Transactions in Foreign Currency and Monetary Gold**

Monetary assets and liabilities in foreign currency and monetary gold are estimated according the official hryvnia exchange rate to foreign currencies/accounting prices of investment metals on whichever date comes earlier: settlement date or accrual date of monetary assets and liabilities and later on reassessed each time the official exchange rate/accounting price changes.

As of 31 December 2019 and 2020, the calculation of the official hryvnia exchange rate against the U.S. dollar takes into account the information about all TOD, TOM, and SPOT transactions to buy/sell U.S. dollars that were conducted in the FX market by banks with other banks and with the NBU on the day of the calculation of the official exchange rate and that were reported to the NBU by trading information systems via relevant information exchange channels. As of 31 December 2020 and 2019, the official hryvnia exchange rate to other currencies was set based on the information on

the official hryvnia exchange rate to the U.S. dollar and on BFIX quotes (value of weighted average exchange rate/price quotes Bloomberg Generic Price for foreign currencies on the SPOT market against the U.S. dollar/ the U.S. dollar to foreign currencies according to TIC BLOOMBERG) for currencies for which TIS BLOOMBERG publishes the BFIX quotation on the day the official hryvnia exchange rate is calculated.

In 2019-2020, the official hryvnia to U.S. dollar exchange rate was set each business day.

Monetary assets and liabilities in foreign currency and monetary gold are reported in the consolidated financial statements according the official hryvnia exchange rate to foreign currencies/accounting prices of investment metals set/estimated by the NBU as of the date of the consolidated statement of financial position.

Monetary gold stands for gold reserves in bullions of global standard and coins not less than 995 fineness that belong to the NBU and make up international reserves. Monetary gold transactions can only be transacted between monetary regulators of different states or between those regulators and international lending institutions. The gold owned by the NBU but included in reserve assets is not recognized as monetary gold.

Monetary gold is reported by weight in Troy ounces and its value in hryvnia according to accounting price of investment metals. Accounting price of investment metals is estimated based on BFIX price quotations in U.S. dollars against investment metals released by TIS BLOOMBERG (or information on the last available price of investment metals received from the website of the London Bullion Market Association or TIC) and the official hryvnia exchange rate against the U.S. dollar.

Gold in foreign banks generating interest is reported as funds and deposits in foreign currency and investment metals (nonfinancial assets) and recognized in the consolidated financial statements at the accounting price of investment metals as of the date of the consolidated statement of financial position.

The main official exchange rates of hryvnia against foreign currencies/accounting price of investment metals used for reporting the monetary items of the consolidated statement of financial position and monetary gold, were as follows:

	31 December 2020 (in hryvnias)	31 December 2019 (in hryvnias)
1 U.S. dollar	28.2746	23.6862
1 SDR	40.723015	32.7539
1 euro	34.7396	26.422
1 GBP	38.4393	31.0206
1 Troy ounce of gold	53,200.92	35,802.17

Remeasurement of monetary assets and liabilities in foreign currency and monetary gold – as well as gold in foreign banks due to the change in the official hryvnia exchange rate against foreign currencies/accounting price of investment metals – are reported as financial results in the consolidated statement of profit or loss and other comprehensive income recognized in the period in which they occurred.

#### Offsetting

Offsetting of financial assets and liabilities (with only the net amount being included in the consolidated statement of financial position) may be carried out only based on a legally defined right to offset the recognized amounts in case of an intention to simultaneously sell an asset and settle liabilities or make settlements on the basis of a net amount.

# Approach to Disclosing Gross Carrying Amount and Allowances for Expected Credit Losses

The following disclosure approach is applied: these consolidated financial statements reflect changes in the gross carrying amount and allowances for expected loan losses only for those financial assets measured at amortized cost on which there were outstanding debts at the start and/or end of the reporting period.

## Critical Estimates and Judgements in Applying Financial Instruments Accounting Principles

A professional judgment/assumption is a documented reasoned decision of the NBU's employees, which is based on:

compliance of actual actions to determine each component of the expected credit loss assessment with the NBU's methodology on assessing expected credit losses from financial instruments

comprehensive and unbiased analysis of all information that influences the determination of the size of components and factors (events, attributes) of assessing credit risk and expected credit losses

the NBU's own experience which is based on reliable, uninterrupted, complete, and integral statistical data accumulated over at least previous three consecutive years

ensuring a comprehensive, timely, and objective assessment of credit risk and expected credit losses in compliance with the principles set out in the NBU's methodology on assessing expected credit losses from financial instruments

#### Measurement of allowances for expected credit losses on demand deposits and time deposits in foreign currency and monetary gold

The NBU regularly revises demand deposits and term deposits in foreign currency and monetary gold at amortized cost for impairment.

The NBU's management uses consolidated statistics from international rating agencies Fitch Ratings, Moody's and Standard & Poor's for a period allowing to consider the impact of the economic cycle (at least 10 years) to estimate the probability of default (PD) and loss given default (LGD) in order to determine a need for recognizing expenses on allowances for expected credit losses.

Demand deposits and term deposits in foreign currency are considered to have low credit risk, if the long-term credit rating of the counterparty under the relevant financial instrument on the reporting date is not lower than BBB-, that is, belongs to an investment class confirming the counterparty's high ability to fulfill all its contractual obligations in near future (its high current creditworthiness), even if adverse changes in the economic environment and long-term business activity may, but not necessarily, reduce creditworthiness of such counterparty.

Demand and term deposits in foreign currency and monetary gold are considered to be conditionally devoid of credit risk, if they are direct liabilities of:

- the International Monetary Fund or the Bank of International Settlements, denominated in any currency
- the country, denominated in the currency of this country, except for liabilities in euro

- a foreign central bank, denominated in the currency of the central bank's home country, except for liabilities in euro
- the European Central Bank, government of the Federal Republic of Germany and Deutsche Bundesbank denominated in euro.

As at 31 December 2020 and 2019 all demand funds and term deposits in foreign currency and monetary gold had a low level of credit risk or were conditionally devoid of credit risk.

# Measurement of allowances for expected credit losses on securities at amortized cost

The NBU regularly revises its securities portfolio measured at amortized cost for impairment.

The NBU's management applies their professional judgment about attributes of significant increase of credit risk and cash shortfalls under securities portfolio in order to determine a need for recognizing the expenses on allowances for expected credit losses. Such attributes may include data, which denote a negative change in the issuer's solvency.

Government debt securities denominated in domestic currency of the issuing country, except for euro obligations, are considered to be conditionally devoid of credit risk. For debt securities that are considered to be conditionally devoid of credit risk, probability of default for a period of 12 months and for the maturity of the financial instrument is deemed insignificant, i.e. close to zero.

As of 31 December 2020 and 2019, the outstanding debt on bonds of other government institutions at amortized cost was at stage three of impairment. The NBU's management believes that as of 31 December 2020 there was the objective evidence of impairment of these assets (violation by the securities issuer of the issue terms – nonpayment of face value and coupon for regular interest period as envisaged by the terms of issue).

The NBU's management believes that as of 31 December 2020 and 31 December 2019 there were no other signs of impairment of securities carried at amortized cost (Note 9).

## Measurement of Allowances for Expected Credit Losses on Loans Granted to Banks and Other Borrowers

The NBU regularly revises its loan portfolio for impairment.

A large portion of loans to banks and other borrowers are assessed on an individual basis. The NBU's management uses professional judgment to estimate future cash flows under each loan. Allowances for impairment of individual significant loans are calculated using the discounted cash flow method applied to future cash flows under these loans, taking into account loan repayments and collateral sales under the loans. While estimating expected credit losses under the loans to the banks under liquidation, declared insolvent or having significant financial difficulties (stage 3), the NBU's management applies judgment and estimates future cash flows primarily from sale of collateral.

The NBU measures the cost of real estate pledged as collateral for loans at fair value. Estimated value of collateral impacts the allowances for expected credit losses, which requires professional judgment. Accounting estimates related to the valuation of real estate, when there are no market prices formed in an active market, are a main source for uncertainty in valuation, as (i) it is characterized by high variability from period to period and (ii) the recognition of changes in estimates could potentially have a significant impact.

The methodology and assumptions used to estimate the amounts and timing of future cash flows are constantly

reviewed to avoid any discrepancies between the estimated and actual costs.

A 10% decrease or increase in future discounted cash flows under the loans that are at stage 3 and assessed on an individual basis, which is possible due to differences in the amounts and maturities of cash flows, will lead to an increase in the expected credit losses by UAH 508 million or a decrease by UAH 508 million, respectively, as of 31 December 2020 (as of 31 December 2019 this would have led to an increase in the allowances for expected credit losses by UAH 2,432 million or decrease by UAH 326 million, respectively).

## Section II.II. Financial assets and liabilities

## 6. Funds and deposits in foreign currency and investment metals

	2020	2019
		(UAH million)
Financial assets at amortized cost		
Foreign currency cash	22,164	589
Demand deposits	70,305	14,085
Term deposits in foreign currency	25,863	74,848
Allowances for expected credit losses on deposits in foreign currency at amortized cost	(1)	(10)
Total financial assets at amortized cost	118,331	89,512
Financial assets at fair value through profit or loss		
Demand deposits for settling futures transactions	8	8
Total financial assets	118,339	89,520
Nonfinancial assets		
Demand deposits:		
in gold	2,773	648
Total nonfinancial assets	2,773	648
Total funds and deposits in foreign currency and investment metals	121,112	90,168

The sum of demand deposits at amortized cost as of 31 December 2020 includes balances of special purpose accounts of UAH 47 million (UAH 97 million as of 31 December 2019), which are maintained by the NBU within the credit lines granted by international financial institutions, and which are restricted for use.

For the purposes of the consolidated statement of cash flows, the cash flows on term deposits in gold are classified as investment activities, while demand accounts in gold - as operating activities.

As of 31 December 2020 and 2019, all funds and deposits in foreign currency are not secured.

All funds and deposits in foreign currency are expected to be recovered within 12 months (as of 31 December 2019, these funds and deposits were also expected to be recovered within 12 months).

Funds and deposits in foreign currency are analyzed by geographical concentration risk in Note 23, by credit risk – in Note 24, by foreign currency risk – in Note 25, by interest rate risk – in Note 26, and by liquidity risk – in Note 27.

The NBU's accounting policy on classification and assessment of funds and deposits in foreign currency are given in Note 4.

As of 31 December 2020, the gross carrying value of demand deposits was UAH 70,305 million and it changed mostly due to increase in balances (as of 31 December 2019, it was UAH 14,085 million and it changed mostly due to funds withdrawing from accounts). During 2020 and 2019, all demand deposits were at stage 1 for assessing expected credit losses. In 2020 and 2019, the NBU did not recognize any allowances for expected credit losses on the on demand accounts.

As of 31 December 2020, the gross carrying value of term deposits in foreign currency was UAH 25,863 million, allowances for expected credit losses were UAH 1 million (as of 31 December 2019, the gross carrying value of term deposits was UAH 74,848 million, and allowances for expected credit losses was UAH 10 million). During 2020 and 2019, all term deposits in foreign currency were at stage 1 for assessing expected loan losses. The change of gross carrying amount was caused by return of the deposits available as of the beginning of the year and placement of new ones, and changes in allowances were due to release of allowances of against returned deposits and recognition of new allowances against placed deposits.

The sum of demand deposits at fair value through profit or loss as of 31 December 2020 includes funds of UAH 8 million (UAH 8 million in 2019) for settling futures transactions under agreements on investment management and the provision of advisory services between the IBRD and the NBU.

Since October 2013 the NBU has carried out transactions with futures for the purpose of regulating the interest rate risk under an Investment Management and Consulting Services Agreement between the NBU and the International Bank for Reconstruction and Development.

As of 31 December 2020, the NBU had 274 long stockexchange interest futures contracts of UAH 1031 million or USD 36 million in face value, maturing in March 2021 (as of 31 December 2019, the NBU had 269 long stock-exchange interest futures contracts of UAH 1,373 billion or USD 58 million in face value, maturing in March 2020, and 90 short stock-exchange interest futures contracts of UAH 524 million or USD 22 million in face value, maturing between June 2020 and December 2020). UAH 8 million for settlements under futures transactions (UAH 8 million as of 2019) was measured at fair value and included in FX funds and deposits.

## 7 Foreign Securities

As of 31 December 2020, foreign securities comprised the following:

	Government bonds	Securities issued by international agencies, banks and other issuers	Total
			(UAH million)
Foreign securities at fair value through profit or loss:			
Debt securities by issuers:			
securities issued by U.S. issuers:			
denominated in USD	404,704	6,013	410,717
denominated in GBP	-	921	921
securities issued by EU issuers:			
denominated in USD	7,119	46,142	53,261
denominated in EUR	-	9,592	9,592
denominated in GBP	1,345	2,855	4,200
securities issued by other issuers:			
denominated in USD	10,137	103,063	113,200
denominated in EUR	1,747	37,511	39,258
denominated in AUD	736	328	1,064
denominated in GBP	5,886	2,975	8,861
denominated in Chinese renminbi	345	16,120	16,465
denominated in JPY	412	13,706	14,118
Total debt securities	432,431	239,226	671,657
Equity instruments:			
shares of the Black Sea Trade and Development Bank	-	120	120
investment in the Interstate Bank	-	1	1
Total equity instruments	-	121	121
Total foreign securities at fair value through profit or loss:	432,431	239,347	671,778

All foreign securities are expected to be recovered within 12 months, except for capital instruments worth UAH 121 million (UAH 121 million as of 31 December 2019).

Securities issued by international agencies, banks and other issuers include debt securities issued by foreign central and investment banks, international agencies and other issuers. Foreign securities are analyzed by geographical concentration risk in Note 23, by credit risk – in Note 24, by foreign currency risk – in Note 25, by interest rate risk – in Note 26, and by liquidity risk – in Note 27.

### As of 31 December 2019, foreign securities comprised the following:

	0		
	Government bonds	Securities issued by international agencies, banks and other issuers	Total
			(in UAH million)
Foreign securities at fair value through profit or loss:			
Debt securities by issuers:			
securities issued by U.S. issuers:			
denominated in USD	269,697	5,239	274,936
securities issued by EU issuers:			
denominated in USD	9,089	47,828	56,917
denominated in EUR	149	17,256	17,405
denominated in GBP	8,008	1,489	9,497
denominated in Chinese renminbi	-	3,808	3,808
securities issued by other issuers:			
denominated in USD	4,167	68,734	72,901
denominated in EUR	1,315	37,712	39,027
denominated in AUD	544	250	794
denominated in GBP	-	2,612	2,612
denominated in Chinese renminbi	270	13,655	13,925
denominated in JPY	-	13,036	13,036
Total debt securities	293,239	211,619	504,858
Equity instruments:			
shares of the Black Sea Trade and Development Bank	-	120	120
investment in the Interstate Bank	-	1	1
Total equity instruments	-	121	121
Total foreign securities at fair value through profit or loss:	293,239	211,740	504,979

Information about the nominal value, coupon rate and maturities of foreign debt securities as of 31 December 2020 is presented in the table below:

	Total nominal value in foreign currency, millions	Total nominal value in the hryvnia equivalent, UAH million	Coupon rate, % p.a.	Frequency of coupon payments	Maturity
Debt securities at fair value through profit or loss by issuers:					
Government bonds					
securities issued by U.S. issuers:					
denominated in USD	13,838	391,256	0–2.875	Every 6 months, without coupon payments	From 15 days to 4.9 years
securities issued by EU issuers:					
denominated in USD	247	6,995	0.125–1.875	Quarterly, every 6 months, once a year	From 29 days to 2.3 years
denominated in GBP	35	1,345	0.10875	Quarterly	10.1 months
securities issued by other issuers:					_
denominated in USD	351	9,924	0.4–2.625	Every 6 months	From 1.4 months to 4.8 years
denominated in EUR	50	1,737	0.125	once a year	5.9 years
denominated in AUD	30	657	2.25–5.5	Every 6 months	From 1.9 years to 2.3 years
denominated in GBP	151	5,797	0.5–1.5	Every 6 months	From 22 days to 2.6 years
denominated in Chinese renminbi	80	345	2.95	Every 6 months	5.8 months
denominated in JPY	1,500	412	0.02	Every 6 months	4.5 years
Securities issued by international agencies, banks and other issuers:				· · · · · · · · · · · · · · · · · · ·	
securities issued by U.S. issuers:					
·				Quarterly,	From 11.6
denominated in USD	211	5,977	0.3965-0.75	every 6 months, once a year	months to 4.8 years
denominated in GBP securities issued by EU issuers:	24	923	0.25	once a year	6.7 years
denominated in USD	1,612	45,566	0–3.125	Quarterly, every 6 months, once a year, without coupon payment	From 1.6 months to 6 years
denominated in EUR	273	9,484	0-4	Quarterly, once a year, without coupon payment	From 3.6 months to 6.2 years
denominated in GBP	74	2,845	0–1	once a year, without coupon payment	From 6.1 months to 2 years
securities issued by other issuers:					
denominated in USD	3,625	102,495	0–3.35	Quarterly, every 6 months, once a year, without coupon payment	From 29 days to 4.9 years
denominated in EUR	1,071	37,206	0–0.75	Quarterly, once a year, without coupon payment	From 12 days to 4.8 years
denominated in AUD	15	325	0.869	Quarterly	10.7 months
denominated in GBP	77	2,960	0.375–0.40538	Quarterly, once a year Every 6 months	From 9.1 months to 2.6 years
denominated in Chinese renminbi	3,754	16,267	0–4.8	Every 6 months, once a year, without coupon payment	From 1.9 months to 4.6 years
denominated in JPY	50,000	13,722	0–0.42	Every 6 months, without coupon payments	From 1.9 months to 3.8 years

Information about the nominal value, coupon rate and maturities of foreign debt securities as of 31 December 2019 is presented in the table below:

	Total nominal value in foreign currency, in millions	Total nominal value in the hryvnia equivalent, UAH million	Coupon rate, % p.a.	Frequency of coupon payments	Maturity
Debt securities at fair value through profit or loss by issuers:					
Government bonds					
securities issued by U.S. issuers:					From 4.5
denominated in USD	11,273	267,004	1.125–3.125	Quarterly, every 6 months	to 2.9 years
securities issued by EU issuers:				0 1 1	<b>F</b> 0.0
denominated in USD	381	9,024	1.5–2.5	Quarterly, every 6 months, once a year	From 2.2 months to 2.6 years
denominated in EUR	6	145	0.375	once a year	3.1 years
denominated in GBP	256	7,950	0.5–4.75	Quarterly, every 6 months	From 2.2 months to 3.6 years
securities issued by other issuers:					
denominated in USD	174	4,117	1.875–2.625	Quarterly, every 6 months	From 4.7 months to 4.4 years
denominated in EUR	50	1,321	0.125	once a year	6.9 years
denominated in AUD	32	527	2–5.75	Every 6 months	From 1.4 years to 2.9 years
denominated in Chinese renminbi	80	269	2.95	Every 6 months	1.5 years
Securities issued by international agencies, banks and other issuers:					
securities issued by U.S. issuers:					
denominated in USD	219	5,187	1.375–2.75	Quarterly, every 6 months	From 3 months to 2 years
securities issued by EU issuers:					
denominated in USD	2,002	47,415	0–3.125	Quarterly, every 6 months, once a year, without coupon payments	From 10 days to 3.5 years
denominated in EUR	648	17,122	0-4	Quarterly, once a year, without coupon payments	From 8 days to 4.7 years
denominated in GBP	48	1,489	0–0.625	once a year, without coupon payments	From 17 days to 4.7 months
denominated in Chinese renminbi	1,130	3,826	0–4.5	Every 6 months, without coupon payments	From 1.4 months to 10.9 months
securities issued by other issuers:					
denominated in USD	2,888	68,413	0–3.3	Quarterly, every 6 months, without coupon payment	From 10 days to 4.5 years
denominated in EUR	1,422	37,572	0–0.75	Quarterly, once a year, without coupon payment	From 14 days to 4.8 years
denominated in AUD	15	248	1.7517	Quarterly,	1.9 years
denominated in GBP	84	2,606	0.875–1.17238	Quarterly, once a year	From 3.1 months to 1.8 years
denominated in Chinese renminbi	4,089	13,845	0–4.8	Every 6 months, once a year, without coupon payments	From 2.4 months to 2.3 years
denominated in JPY	60,300	13,041	0–0.42	Every 6 months, without coupon payments	From 1.2 months to 4.8 years

### 8. Transactions with the IMF

#### Accounting Policy

The NBU acts as a depository and a fiscal agent as to the received funds in relations between Ukraine and the International Monetary Fund (IMF).

NBU consolidated financial statements show all fund claims of Ukraine to the IMF and liabilities to the IMF for the funds received by the NBU. The respective assets include

- SDR holdings
- IMF quota contributions (including the reserve position of the IMF).

The respective liabilities include:

- the value of securities issued to the IMF by the NBU from IMF quota contributions and as a fiscal agent for borrowings
- funds on IMF accounts No. 1 and No. 2. The IMF's account No. 1 is used for IMF transactions, including quota subscription payments, purchase and repurchase of funds. Account No. 2 is used for settlements with the IMF in the Ukrainian currency.

Assets and liabilities denominated in SDR, including the IMF quota contributions, are translated into UAH at the NBU's official exchange rate of hryvnia against SDR at the date of the consolidated statement of financial position. The official exchange rate of UAH against SDR is calculated based on the information about the exchange rate of SDR against USD set by the IMF and the NBU's official hryvnia against the U.S. dollar exchange rate. The NBU classifies SDR holdings and IMF quota contributions according to amortized cost.

Return on SDR holdings is recognized as interest income, and charges paid in respect of the use of the IMF's funds are recognized as interest expenses and fees and commissions in the consolidated statement of profit or loss and other comprehensive income. Nonreimbursable fees under arrangements of SDR purchases are recorded as fees and commissions. Expenses related to operations with the IMF are amortized using the effective interest rate method and recorded as interest expense.

## 8.1. SDR holdings

SDR holdings are demand deposits denominated in SDR on the account opened at the IMF for Ukraine.

Movements in the SDR holding accounts in 2020 and 2019 were as follows:

	2020	2019
		(UAH million)
Balance of SDR holdings as of 1 January	234	100
Proceeds from the IMF:		
in favor of the NBU (Note 8.3)	-	-
in favor of the government	55,259	-
Purchase of SDRs	37,099	51,271
Other proceeds and payments	83	-
Loan repayment:		
on behalf of the NBU (Note 8.3)	(17,456)	(15,438)
on behalf of the government	(11,990)	(26,396)
Payment of loan-related fees and commissions	(469)	(15)
Translation of SDRs to other foreign currencies:		
in favor of the NBU	-	-
in favor of the government	(55,259)	-
Payment of interest for the use of IMF loans:		
on behalf of the NBU	(5,019)	(6,155)
on behalf of the government	(2,281)	(2,546)
Payment of interest for the use of funds received under SDR allocation:		
on behalf of the NBU	(9)	(31)
on behalf of the government	(135)	(462)
Other payments	(1)	(1)
Income on SDR holdings	1	6
Exchange differences	71	(99)
Balance of SDR holdings as of 31 December	128	234

In 2020 and 2019, there were no proceeds from the IMF to the NBU.

SDR holdings are analyzed by geographical concentration risk in Note 23, by foreign currency risk – in Note 25, by interest rate risk – in Note 26, and by liquidity risk – in Note 27.

## 8.2. IMF Quota Contributions

The quota balance is a special type of asset that represents Ukraine's contribution as a member of the IMF. Quotas vary based on the economic size of each country and are determined by the Board of Governors of the IMF. The quota determines a member's voting power in the IMF, the limits of its access to the financial resources of the fund, and a participant's share in the allocation of SDRs, the fund's unit of accounting. The major part of Ukraine's quota was paid in the form of non-interest-bearing debt instrument issued by the NBU to the IMF, with the remainder being credited to the IMF accounts No. 1 and No. 2 (Note 8.3).

As of 31 December 2020, Ukraine's total quota in the IMF amounted to SDR 2,012 million (UAH 81,927 million at the year-end official UAH/SDR exchange rate) (31 December 2019: SDR 2,012 million, or UAH 65,894 million at the year-

end official UAH/SDR exchange rate). The quota does not earn interest. Quota contributions are a noncurrent asset.

The reserve position in the IMF is a specific type of asset that is created by converting a part of the contribution of a member country to the IMF liquidity quota. The reserve position is part of the currency reserves of the country.

As of 31 December 2020, the reserve position of Ukraine in the IMF amounted to SDR 241,031 or UAH 10 million at the official UAH/SDR exchange rate at the year-end (31 December 2019: SDR 241,031 or UAH 8 million at the official UAH/SDR rate at the year-end).

IMF quota contributions are analyzed by geographical concentration risk in Note 23, by foreign currency risk – in Note 25, and by liquidity risk – in Note 27.

## 8.3. Liabilities to the IMF

	2020	2019
		(UAH million)
Liabilities to the IMF for SDR purchases	190,151	168,385
Liabilities to the IMF for SDR allocations	3,317	2,671
IMF account No. 2	3	3
Liabilities to the IMF apart from quota contributions	193,471	171,059
Liabilities to the IMF in respect of quota contributions	81,711	65,721
IMF account No. 1	206	165
Liabilities to the IMF to pay quota contributions	81,917	65,886
Total liabilities to the IMF	275,388	236,945

Liabilities to the IMF for SDR allocation represent funds received by the NBU as a result of the special SDR allocation.

Liabilities to the IMF for purchases of SDRs represent loans received from the IMF to accounts with the NBU. In 2020 and 2019, there were no proceeds from the IMF to the NBU (Note 8.1).

IMF account No. 1 is the IMF account with the NBU in domestic currency that is used for transactions with the IMF related to the servicing and repayment of IMF loans. IMF account No. 2 is the IMF account with the NBU in the domestic currency that is used by the IMF for receipts and administrative disbursements in UAH on the territory of Ukraine.

Liabilities to the IMF to pay quota contributions represent liabilities for quota settlement. In 2020 and 2019, there were no changes in liabilities on quota contributions related to the IMF's administrative disbursements in the hryvnia.

In 2020 and 2019, no changes occurred in the size of the quota (Note 8.2).

In 2020, liabilities worth SDR 469 million (UAH 17,456 million at the official exchange rate at the transaction date, or UAH 17,288 million at the annual exchange rate of the IMF) were repaid to the IMF (in 2019, repayments of liabilities to the IMF worth SDR 427 million (UAH 15,438 million at the official exchange rate at the transaction date, or UAH 15,945 million at the annual exchange rate of the IMF were repaid) (Note 8.1).

All liabilities to the IMF are noncurrent, except for balances on IMF accounts No. 1 and No. 2, liabilities to the IMF for SDR allocation, liabilities to the IMF for borrowing the amount of SDR 649 million (UAH 23,932 million at the IMF's annual exchange rate), and interest accrued on liabilities to the IMF (in 2019, SDR 469 million (UAH 17,296 million at the IMF's annual exchange rate) and interest accrued on liabilities to the IMF).

Liabilities to the IMF are analyzed by geographical concentration risk in Note 23, by foreign currency risk – in Note 25, by interest rate risk – in Note 26, and by liquidity risk – in Note 27.

## 9. Domestic Securities

As of 31 December 2020, domestic securities comprised the following:

	Government	Corporate securities	Total
			(UAH million)
Securities at fair value through profit or loss:			
denominated in foreign currencies:			
Government derivatives denominated in USD	1,273	-	1,273
Total securities at fair value through profit or loss	1,273	-	1,273
Debt securities at amortized cost:			
denominated in domestic currency:			
domestic government debt securities	334,128	-	334,128
Total debt securities at amortized cost	334,128	-	334,128
Total domestic securities	335,401	_	335,401

Under the Law of Ukraine *On the National Bank of Ukraine*, the NBU performs securities transactions only on the secondary market.

Domestic government debt securities are issued by the Ministry of Finance of Ukraine and have the nominal value of UAH 1,000 each.

In 2020, the NBU did not purchase domestic government debt securities.

As of 31 December 2019, the bonds of other government institutions included the bonds of the State Mortgage Institution with additional collateral in the form of state guarantee on issuer's obligations provided by the Cabinet of Ministers of Ukraine (hereinafter – the SMI bonds). The State Mortgage Agency bonds were repossessed by the NBU in November 2019 at a nominal value of UAH 946 million and carrying amount of UAH 938 million to implement an amicable settlement with a Ukrainian bank on the repayment of its debt under loans. The SMI bonds have a nominal value of UAH 100,000 each.

The SMI bonds payable in November 2020 according to the bond prospectus were submitted for repayment by the NBU and transferred to the State Mortgage Institution for finalizing the repayment procedure, as specified in the prospectus. The NBU claims on the bonds while repayment pending as of 31 December 2020 are included in other financial assets, as they were not repaid as of that day (Note 11).

Each government derivative has a notional value of USD 1,000 or such aggregate value that is an integer multiple equal to USD 1,000 (hereinafter — the notional value). Payments on government derivatives depend on reaching certain GDP indicators and the indicator of real GDP growth for 2019–2038.

All domestic securities are expected to be redeemed later than 12 months from the reporting date, excluding the nominal value of domestic government debt securities and the accrued interest on debt securities totaling UAH 21,022 million payable in 2020 (as of 31 December 2019: all domestic securities were expected to be redeemed later than 12 months from the reporting date, excluding the nominal value of domestic government debt securities and bonds of other government institutions and accrued interest on debt securities totaling UAH 21,439 million payable within 2019).

Domestic securities are analyzed by credit risk in Note 24, by foreign currency risk – in Note 25, by interest rate risk – in Note 26, and by liquidity risk – in Note 27. Estimated fair value of domestic securities is given in Note 21.

#### As of 31 December 2019, domestic securities comprised the following:

	Government securities	Corporate securities	Total
			(UAH million)
Securities measured at fair value through profit or loss:			
denominated in foreign currencies:			
Government derivatives denominated in USD	987	-	987
Total securities at fair value through profit or loss	987	-	987
Debt securities at amortized cost:			
denominated in domestic currency:			
domestic government debt securities	345,440	-	345,440
bonds of other government institutions	-	953	953
Loss allowances for expected credit losses on debt securities of other state institutions at amortized cost	-	(189)	(189)
Total debt securities at amortized cost	345,440	764	346,204
Total domestic securities	346,427	764	347,191

Information on the nominal value, yield to maturity, coupon income, and maturities of domestic securities as of 31 December 2020 is presented in the table below:

	Total nominal value and contingent amount in hryvnia equivalent in UAH millions	Total nominal value in foreign currency, in millions	Yield to maturity, % p.a.	Coupon rate, % p.a.	Frequency of coupon payments	Maturity
Securities measured at fair value through profit or loss:						
denominated in foreign currencies:						
Government derivatives	1,240	44	-	-	-	Up to 19.4 years
Debt securities at amortized cost:						
denominated in domestic currency:		-		· · · ·	· · · ·	
domestic government debt securities	324,577	-	7.45–15.43	6.6–14.3	once a year, every 6 months	From 1.3 months to 26.9 years

Information on the nominal value, yield to maturity, coupon income, and maturities of domestic securities as of 31 December 2019 is presented in the table below:

	Total nominal value and contingent amount in hryvnia equivalent in UAH millions	Total nominal value in foreign currency, in millions	Yield to maturity, % p.a.	Coupon rate, % p.a.	Frequency of coupon payments	Maturity
Securities measured at fair value through profit or loss:						
denominated in foreign currencies:						
Government derivatives	1,038	44	-	-	-	Up to 20.4 years
Debt securities at amortized cost:						
denominated in domestic currency:						
domestic government debt securities	337,077	_	7.43–28.91	4.9–14.5	once a year, every 6 months	From 21 days to 27.9 years

As of 31 December 2020, the gross carrying value of domestic government securities was UAH 334,128 million (as of 31 December 2019, it was UAH 345,440 million). During 2020 and 2019, all government securities were at stage 1. Changes in gross carrying value in 2020 and 2019 were primarily due to securities repayments. In 2020 and 2019, the NBU did not make provisions for expected credit losses on government securities.

In 2020, all bonds of other government institutions were at stage 3. As of 31 December 2020, bonds of other government institutions were included in other financial assets (Note 11) (as of 31 December 2019, the gross carrying value of bonds of other government institutions was UAH 953 million, and allowances for expected credit losses made UAH 189 million). In 2019, bonds of other government institutions were transferred from stage 1 to stage 3).

## 10. Loans to Banks and Other Borrowers

Loans to banks and other borrowers by the purpose of their issue are classified as follows:

	2020	2019
		(UAH million)
Loans granted to banks to support their liquidity:		
for stabilizing banking activities	41,434	51,324
through tenders conducted by the NBU:		
short-term	13,916	386
long-term	48,381	-
Other	10	10
Loans granted to support small and medium enterprises based on funds received from the European Bank for Reconstruction and Development (EBRD)	36	36
Other	2	2
Allowance for expected credit losses on loans to banks and other borrowers	(36,849)	(37,915)
Total loans to banks and other borrowers	66,930	13,843

In 2020, the NBU supported the liquidity of banks through establishing a standing refinancing line (overnight loans), refinancing banks for the periods from 14 to 90 days and from one to five years (in 2019 - up to 14 days) by holding tenders.

The NBU performs banks refinancing by providing the banks overnight loans and refinancing loans and has the outstanding debts under those loans as of 31 December 2020 and 2019. The NBU grants to banks the overnight and refinancing loans secured by a pool that may consist of the following asset (property) types: Ukraine's government bonds, the NBU's certificates of deposit, bonds of the international financial institutions (issued in accordance with the Ukrainian law), corporate bonds placed against the CMU's guarantees, domestic municipal bonds, foreign currency (US dollars, Euros, GB pounds, Swiss francs, Japanese yens).

The securities (Ukraine's government bonds, corporate bonds, including those placed under the CMU's guarantees), foreign currency, shares of the owners of a bank's qualifying holding, real estate, and property rights under loan agreements were accepted as collateral against stabilization loans issued to banks to support their liquidity before 2017 and which remained outstanding as of 31 December 2020 and 2019. Since 2017 the NBU did not grant the stabilization loans. Instead of stabilization loans the NBU may issue to banks the loans for emergency liquidity assistance but no such loans were issued yet.

In 2020, the movements in gross carrying value of loans for stabilizing banking activities were as follows:

	Stage 1	Stage 2	Stage 3	Initially impaired assets	Total
				(U	AH million)
Gross carrying value of loans for stabilizing banking activities as of 1 January 2020	-	_	51,324	_	51,324
Purchased/originated loans	-	-	-	-	
Transfer to Stage 1	-	-	-	_	-
Transfer to Stage 2	_	-	-	-	-
Transfer to Stage 3	-	-	-	-	-
Derecognized or repaid loans	-	-	(7,759)	-	(7,759)
Assets written off and otherwise derecognized against allowances	-	-	-	-	-
Other changes (including partial repayment)	-	-	(2,131)	-	(2,131)
Gross carrying value of loans for stabilizing banking activities as of 31 December 2020	_	-	41,434	-	41,434

Allowance for expected credit losses on loans for stabilizing banking activities in 2020 were as follows:

	Stage 1	Stage 2	Stage 3	Initially impaired assets	Total
				(UA	H million)
Allowance for expected credit losses on loans for stabilizing banking activities as of 1 January 2020	_	_	37,585	_	37,585
Purchased/originated assets	_	-	-	-	-
Transfer to Stage 1	_	-	-	-	-
Transfer to Stage 2	_	_	-	-	-
Transfer to Stage 3	_	-	-	-	-
Derecognized or repaid assets	_	-	(219)	-	(219)
Assets written off and otherwise derecognized against allowances	_	-	-	-	-
Amortization of discount	_	-	(969)	-	(969)
Change in parameters/models used for calculating allowances	_	-	73	-	73
Allowance for expected credit losses on loans for stabilizing banking					
activities as of 31 December 2020	-	-	36,470	-	36,470

In 2019, the movements in gross carrying value of loans for stabilizing banking activities were as follows:

	Stage 1	Stage 2	Stage 3	Initially impaired assets	Total
				(U,	AH million)
Gross carrying value of loans for stabilizing banking activities as of 1 January 2019	107	_	56,987	_	57,094
Purchased/originated loans	-	-	-	-	-
Transfer to Stage 1	_	-	-	-	-
Transfer to Stage 2	-	-	-	-	-
Transfer to Stage 3	_	_	-	-	-
Derecognized or repaid loans	(107)	-	(2,335)	-	(2,442)
Assets written off and otherwise derecognized against allowances	_	-	(95)	-	(95)
Other changes (including partial repayment)	-	-	(3,233)	-	(3,233)
Gross carrying value of loans for stabilizing banking activities as of 31 December 2019	_	-	51,324	-	51,324

Allowance for expected credit losses on loans for stabilizing banking activities in 2019 were as follows:

	Stage 1	Stage 2	Stage 3	Initially impaired assets	Total
				(UA	H million)
Allowance for expected credit losses on loans for stabilizing banking activities as of 1 January 2019	_	-	40,602	_	40,602
Purchased/originated assets	-	-	-	-	-
Transfer to Stage 1	-	-	-	-	-
Transfer to Stage 2	-	-	-	-	-
Transfer to Stage 3	-	-	-	-	-
Derecognized or repaid assets	-	_	(924)	-	(924)
Assets written off and otherwise derecognized against allowances	-	_	(28)	-	(28)
Amortization of discount	-	_	(1,101)	-	(1,101)
Change in parameters/models used for calculating allowances and their partial repayment	_	_	(964)	_	(964)
Allowance for expected credit losses on loans for stabilizing banking activities as of 31 December 2019	-	-	37,585	-	37,585

In 2020, the movements in gross carrying value of loans issued to banks by holding tenders were as follows:

	Stage 1	Stage 2	Stage 3	Initially impaired assets	Total
				(U	AH million)
Gross carrying value of loans issued to banks by holding tenders					
as of 1 January 2020	104	-	282	-	386
Purchased/originated loans	62,015	-	-	-	62,015
Transfer to Stage 1	-	-	-	-	-
Transfer to Stage 2	-	-	-	-	-
Transfer to Stage 3	(161)	-	161	-	-
Derecognized or repaid loans	(104)	-	-	-	(104)
Assets written off and otherwise derecognized against allowances	-	-	-	-	-
Other changes (including partial repayment)	-	-	-	_	-
Gross carrying value of loans issued to banks by holding tenders					
as of 31 December 2020	61,854	-	443	-	62,297

Allowance for expected credit losses on loans issued to banks by holding tenders in 2020 were as follows:

	Stage 1	Stage 2	Stage 3	Initially impaired assets	Total
				(UAH	I million)
Allowance for expected credit losses on loans issued to banks by holding tenders as of 1 January 2020	_	_	282	-	282
Purchased/originated assets	5	-	-	-	5
Transfer to Stage 1	-	-	-	-	-
Transfer to Stage 2	-	-	-	-	-
Transfer to Stage 3	-	-	-	-	-
Derecognized or repaid assets	-	-	-	-	-
Assets written off and otherwise derecognized against allowances	-	-	-	-	-
Amortization of discount	-	-	_	_	-
Change in parameters/models used for calculating allowances and their partial repayment	_	_	44	_	44
Allowance for expected credit losses on loans issued to banks by holding tenders as of 31 December 2020	5	-	326	-	331

In 2019, the movements in gross carrying value of loans issued to banks by holding tenders were as follows:

	Stage 1	Stage 2	Stage 3	Initially impaired assets	Total
				(U	AH million)
Gross carrying value of loans issued to banks by holding tenders as of 1 January 2019	4,195	-	299	_	4,494
Purchased/originated loans	104	-	-	-	104
Transfer to Stage 1	_	_	-	-	-
Transfer to Stage 2	-	-	-	-	-
Transfer to Stage 3	-	-	-	_	-
Derecognized or repaid loans	(4,195)	-	-	-	(4,195)
Assets written off and otherwise derecognized against allowances	_	-	(17)	-	(17)
Other changes (including partial repayment)	_	_	-	-	-
Gross carrying value of loans issued to banks by holding tenders as of 31 December 2019	104	-	282	-	386

Allowance for expected credit losses on loans issued to banks by holding tenders in 2019 were as follows:

	Stage 1	Stage 2	Stage 3	Initially impaired assets	Total
				(UAH	l million)
Allowance for expected credit losses on loans issued to banks by holding tenders as of 1 January 2019	-	-	300	_	300
Purchased/originated assets	-	-	-	-	-
Transfer to Stage 1	-	-	-	-	-
Transfer to Stage 2	-	-	-	-	-
Transfer to Stage 3	-	-	-	-	-
Derecognized or repaid assets	-	-	-	-	-
Assets written off and otherwise derecognized against allowances	-	-	(19)	-	(19)
Amortization of discount	-	-	-	-	-
Adjustment of interest income under loans	-	-	1	-	1
Change in parameters/models used for calculating allowances and their partial repayment	_	_	_	_	_
Allowance for expected credit losses on loans issued to banks by holding tenders as of 31 December 2019	-	-	282	-	282

As of 31 December 2020 and 2019, other loans were at stage 3, gross carrying value was UAH 10 million, allowance for expected credit losses was UAH 10 million.

As of 31 December 2020 and 2019, loans granted under credit lines to support small and medium entities from funds received from the EBRD and other loans were/remained at stage 3, gross carrying value was UAH 38 million, allowance for expected credit losses was UAH 38 million.

#### The information on gross carrying value of loans by collateral types as of 31 December 2020 is given below:

	Loans granted to banks to support their liquidity	Loans granted to support small and medium enterprises based on funds received from the European Bank for Reconstruction and Development (EBRD)	Loans granted to the Deposit Guarantee Fund, and others	Domestic public debt	Total
					(UAH million)
Loans secured by:					
immovable property	6,618	-	-	-	6,618
securities	53,209	_	-	-	53,209
property rights under credit agreements	694	-	-	-	694
other collateral	9,453	-	-	-	9,453
Unsecured loans	33,767	36	2	1,635	35,440
Total loans to banks and other borrowers	103,741	36	2	1,635	105,414

The information on gross carrying value of loans by collateral types as of 31 December 2019 is given below:

	Loans granted to banks to support their liquidity	Loans granted to support small and medium enterprises based on funds received from the European Bank for Reconstruction and Development (EBRD)	Loans granted to the Deposit Guarantee Fund, and others	Domestic public debt	Total
					(UAH million)
Loans secured by:					
real assets	14,993	-	-	-	14,993
securities	95	-	_	-	95
property rights under credit agreements	1,993	-	-	-	1,993
other collateral types	989	-	-	-	989
Unsecured loans	33,650	36	2	1,727	35,415
Total loans to banks and other borrowers	51,720	36	2	1,727	53,485

Loans to banks and other borrowers are analyzed by geographical concentration risk in Note 23, by credit risk – in Note 24, by foreign currency risk – in Note 25, by interest rate risk – in Note 26, and by liquidity risk – in Note 27. Estimated fair value of loans to banks and other borrowers is presented in Note 21.

#### Loan Commitments

As of 31 December 2020, the NBU had commitments for granting loans to the Deposit Guarantee Fund under an open revolving credit line totaling UAH 2,000 million (as of 31 December 2019, the NBU had commitments in UAH 2,000 million).

## 11. Other Financial Assets

	2020	2019
		(UAH million)
Other financial assets at amortized cost:		
NBU loans due from employees	60	75
Allowance for expected credit losses on loans to employees	(6)	(6)
Claims under bonds of other government institutions	983	-
Allowances for expected credit losses on claims under bonds of other government institutions	(76)	-
Receivables	154	171
Allowance for expected credit losses on receivables	(15)	(12)
Other	169	-
Total financial assets at amortized cost	1,269	228
Other financial assets at fair value through profit or loss		
Derivative financial assets (interest rate swap agreement)	41	_
Rights of claim under credit agreements transferred to the NBU	5	8
Total other financial assets	1,315	236

Other financial assets are unsecured.

Redemption of other financial assets is expected within 12 months, excluding long-term receivables, loans to NBU employees, and claims on interest rate swap assets.

As of 31 December 2020 and 2019, loans to employees were at stages 1, 2, and 3. During a year ended 31 December 2020, no transition between stages, nor other substantial changes occurred (during a year ended 31 December 2019, no transition between stages, nor other changes occurred).

As of 31 December 2020, claims on bonds of other government institutions included claims on SMI bonds under the ongoing redemption procedure as of 31 December 2020 (Note 9).

In 2020, with the aim of boosting the development of financial markets, strengthening the effectiveness of monetary

transmission, and supporting long-term lending, the NBU introduced a new financial instrument – interest rate swap transactions, which are derivative instruments (derivatives). As of 31 December 2020, the NBU had 31 interest rate swap agreements for the total amount of UAH 15,391 million with maturity periods from 2 to 5 years (including: face value of transactions maturing in 2 years was UAH 2,430 million, maturing in 3 years – UAH 7,461 million, maturing in 4 years – UAH 3,500 million, maturing in 5 years – UAH 2,000 million). Other financial assets include derivative financial assets on interest rate swap transactions. Other financial liabilities on interest rate swap transactions are presented in other financial liabilities (Note 15).

Other financial assets are analyzed by geographical concentration risk in Note 23, by credit risk – in Note 24, by foreign currency risk – in Note 25, by interest rate risk – in Note 26, and by liquidity risk – in Note 27.

## 12. Accounts of Banks

	2020	2019
		(UAH million)
Correspondent accounts:		
in domestic currency	37,501	52,438
in foreign currency	-	23,686
Accounts of banks on special use terms:		
in domestic currency	1,370	1,959
in foreign currency	165	352
Funds placed to ensure the repayment of the debts of banks to the NBU:		
in foreign currency	10,981	9
Total accounts of banks	50,017	78,444

As of 31 December 2020 and 2019, interest on the balances in the correspondent account was not accrued.

Accounts of banks on special-use terms as of 31 December 2020 and 2019 included funds placed for the purposes of liquidation committees of banks to make settlements in the process of a bank's liquidation, as well as in other cases specified by the laws of Ukraine and the NBU's regulations.

As of 31 December 2020 and 2019, all accounts of banks were to mature within 12 months.

Accounts of banks are analyzed by geographical concentration risk in Note 23, by foreign currency risk – in Note 25, by interest rate risk – in Note 26, and by liquidity risk – in Note 27.

## 13. Accounts of Government and Other Institutions

	2020	2019
		(UAH million)
Funds of budgets and budget entities	69,093	36,277
Deposit Guarantee Fund	1,414	2,498
Other	157	207
Total accounts of government and other institutions	70,664	38,982

The NBU services the accounts of the State Budget of Ukraine (hereinafter - the State Budget) and local budgets, which are consolidated on the single treasury account.

In accordance with the Law of Ukraine *On the National Bank of Ukraine*, all budget accounts are non-interest-bearing, except for the accounts of the Deposit Guarantee Fund, which bore interest of 5.68% as of 31 December 2020 (31 December 2019: 9.53%).

As of 31 December 2020 and 2019, all accounts of government and other institutions were maturing within 12 months.

Accounts of government and other institutions are analyzed by geographical concentration risk in Note 23, by foreign currency risk – in Note 25, by interest rate risk – in Note 26, and by liquidity risk – in Note 27.

## 14. Certificates of Deposit Issued by the NBU

The certificates of deposit issued by the NBU are one of its monetary policy instruments. They are debt securities issued by the NBU in nondocumentary form evidencing the placement of banks' funds with the NBU and the right of

banks to receive on their maturity the funds placed, together with the interest accrued. The yield on the certificates of deposit is set based on the NBU's interest rate policy framework taking into account the policy's current objectives.

	2020	2019
		(UAH million)
Certificates of deposit at amortized cost:		
Overnight certificates of deposit	52,494	58,716
Certificates of deposit with maturities up to 100 days	110,991	93,216
Total amount of certificates of deposit at amortized cost	163,485	151,932

As of 31 December 2020 and 2019, the nominal value of the certificates of deposit issued by the NBU was UAH 1 million each.

The weighted average interest rate for certificates of deposit placed in 2020 was 7.22% per annum, and the initial period of placement varied from 1 to 14 days (in 2019: a weighted

average yield of 15.18% per annum, and the initial period of placement varied from 1 to 15 days).

As of 31 December 2020 and 2019, all certificates of deposit issued by the NBU were maturing within 12 months.

During 2020 and 2019, the movements in book value of certificates of deposit were as follows:

	2020	2019
		(UAH million)
Certificates of deposit (book value) as of 1 January	151,932	61,867
Placement of certificates of deposit	163,602	151,686
Repayment of certificates of deposit	(151,686)	(61,736)
Other movements (accrual and payment of interest)	(363)	115
Certificates of deposit (book value) as of 31 December	163,485	151,932

Information on the nominal value, weighted average yield, interest rate, and period of placement as of 31 December 2020 is presented in the table below:

	Total nominal value of certificates of deposit, in UAH millions	Weighted average yield, % p.a.	Interest rate, % p.a.	Period of placement, calendar days	Frequency of interests payments
Certificates of deposit at amortized cost:					
Overnight certificates of deposit	52,487	5.00	5.00	4	1 time during repayment
Certificates of deposit with maturities up to 100 days	110,954	6.00	6.00	7	1 time during repayment

Information on the nominal value, weighted average yield, interest rate, and period of placement as of 31 December 2019 is presented in the table below:

	Total nominal value of certificates of deposit, in UAH millions	Weighted average yield, % p.a.	Interest rate, % p.a.	Period of placement, calendar days	Frequency of interests payments
Certificates of deposit at amortized cost:					
Overnight certificates of deposit	58,642	11.50	11.50	6	1 time during repayment
Certificates of deposit with maturities up to 100 days	93,044	13.50	13.50	14	1 time during repayment

Certificates of deposit are analyzed by geographical concentration risk in Note 23, by foreign currency risk – in Note 25, by interest rate risk – in Note 26, and by liquidity risk – in Note 27.

## 15. Other Financial Liabilities

	2020	2019
		(UAH million)
Other financial liabilities at amortized cost:		
Employee benefits liabilities	445	385
Accounts payable	96	276
Other	19	11
Total other financial liabilities at amortized cost	560	672
Other financial liabilities at fair value through profit or loss:		
Derivative financial liabilities	300	-
Total other financial liabilities	860	672

Other financial liabilities include derivative financial liabilities for interest rate swap transactions in the amount of UAH 206 million (derivative financial assets for interest rate swap transactions and their terms are presented in Note 11) and FX swaps in the amount of UAH 94 million.

For the purpose of managing foreign exchange reserves, in 2020, the NBU performed foreign currency swaps with foreign banks with the maturity up to three months. As of 31 December 2020, the NBU had 11 foreign currency swap USD 800 million deals assets amounting to on (UAH 22,620 million according to the official exchange rate as of the end of the year) and UAH 2,280 million, and amounts of liabilities payable amount to JPY 62,208 million (UAH 17,072 million according to the official exchange rate of the end of the year), EUR 163 million as

(UAH 5,672 million according to the official exchange rate as of the end of the year), and USD 80 million (UAH 2,262 million according to the official exchange rate as of the end of the year).

Repayment of other financial liabilities is expected in 12 month, save for long-term liabilities under employee benefits and long-term accounts payable that are not significant for these consolidated financial statements and hence not presented separately in this note.

Other financial liabilities are analyzed by geographical concentration risk in Note 23, by foreign currency risk – in Note 25, by interest rate risk – in Note 26, and by liquidity risk – in Note 27.

## 16. Cash and Cash Equivalents

	Note	2020	2019
			(UAH million)
Foreign currency cash	6	22,164	589
Demand deposits (other than restricted funds)	6	70,258	13,988
Short-term deposits with maturities of up to three months (other than deposits in gold, investment metals, and restricted funds)	6	25,860	74,808
SDR holdings	8.1	128	234
Total cash and cash equivalents		118,410	89,619

#### Changes in liabilities that resulted from financial activities in 2020:

	Note	As of 1 January 2020	Issue/ attraction/ (repayment) of liabilities	Interest paid	Changes in exchange rates	Interest expenses accrued	Other	As of 31 December 2020
								(UAH million)
Banknotes and coins issue in circulation		425,256	133,438	-	_	_	-	558,694
Liabilities to the IMF	8.3	236,945	(17,456)	(5,027)	55,881	4,993	52	275,388
Certificates of deposit issued by the NBU	14	151,932	11,636	(10,741)	_	10,539	119	163,485

The NBU classifies interests paid as cash flows from operating activity in the consolidated statement of cash flows.

Changes in liabilities that resulted from financial activities in 2019:

	Note	As of 1 January 2019	Issue/ attraction/ (repayment) of liabilities	Interest paid	Changes in exchange rates	Interest expenses accrued	Other	As of 31 December 2019
								(UAH million)
Banknotes and coins issue in circulation		400,334	24,922	_	_	_	_	425,256
Liabilities to the IMF	8.3	294,762	(15,438)	(6,186)	(42,792)	6,362	237	236,945
Term deposits	12	41	(40)	-	(1)	-	-	-
Certificates of deposit issued by the NBU	14	61,867	90,022	(9,534)	_	9,649	(72)	151,932

# Section II.III. Financial Results on Financial Instruments

#### **Recognition of income and expenses**

#### Interest income and expenses

Interest income and expense are recognized in the consolidated statement of profit or loss and other comprehensive income for all debt instruments (other than financial assets measured at fair value through profit or loss) on accrual basis using the effective interest rate method:

for financial assets in the first and second stages of impairment – based on gross carrying amount

for financial assets in the third stage of impairment and for financial liabilities – based on amortized cost

for purchased or originated credit-impaired financial assets – based on the effective interest rate, adjusted for credit risk, that is applied to amortized cost.

The NBU records inflation indexed government bonds as floating-rate debt instruments and recognizes interest income using an effective interest rate that is revised monthly on the basis of actual inflation rates for the reporting period and not on the basis of inflation expectations or projections.

Interest income on debt securities measured at fair value through profit or loss is determined based on the nominal interest rate and is recognized in the consolidated statement of profit or loss and other comprehensive income within results on transactions with debt securities at fair value.

#### Fee and commission income

Other commission income and expenses are recognized on an accrual basis in the reporting period in which the respective services are provided or received.

#### Gains/losses from revaluation of assets and liabilities

Unrealized gains/losses from revaluation of assets and liabilities denominated in foreign currencies (investment metals) and monetary gold are recognized in connection with changes in the exchange rate of the hryvnia against foreign currencies, the book value of investment metals during the reporting year, and in relation to revaluation of securities, derivatives, and other financial instruments to their current fair value.

Gains/losses from revaluation of assets and liabilities are recognized as realized on disposal or redemption of the relevant revalued assets and liabilities. The amount so recognized equals the cumulative unrealized revaluations as of the date of said disposal or redemption.

Gains/losses from revaluation of foreign currency, monetary gold, and investment metals are recognized as realized at the end of the reporting month in case of decrease of the total open position in foreign currency, monetary gold, and investment metals. The amount so recognized is proportional to the amount of said decrease.

Revaluation of monetary assets and liabilities in foreign currency and monetary gold, as well as gold held in foreign banks, due to changes in the official hryvnia exchange rate against foreign currencies/accounting price of investment metals are reported as financial results in the consolidated statement of profit or loss and other comprehensive income in the period in which they occurred.

## 17. Interest Income and Expenses

	2020	2019
		(UAH million)
Interest income		
Income on domestic securities at amortized cost	28,506	32,500
Income on loans to banks and other borrowers	2,277	2,887
Income on accounts and deposits in foreign currencies	282	1,170
Income on SDR holdings	1	6
Income on domestic public debt	144	135
Other	15	2
Total interest income at the effective interest rate	31,225	36,702
Interest expenses		
Expenses on certificates of deposit issued by the NBU	(10,525)	(9,606)
Expenses on operations with the IMF	(4,994)	(6,362
Expenses on accounts of Deposit Guarantee Fund	(192)	(163)
Expenses on borrowings received	(96)	(136)
Other interest expenses	-	(1)
Total interest expenses at the effective interest rate	(15,807)	(16,268)
Interest expenses on demand deposits and term deposits with a negative interest rate	(94)	(85)
Net interest income	15,324	20,349

Other interest income includes interest income on loans to employees.

In 2020, income on domestic securities at amortized cost included income on inflation indexed domestic government debt securities worth UAH 8,561 million (in 2019 – UAH 11,041).

# 18. Results on operations with financial assets and liabilities in foreign currency and monetary gold

	2020	2019
		(UAH million)
Unrealized gains/(losses) on operations with financial assets and liabilities in foreign currency and		
monetary gold	79,832	(53,074)
Realized results on operations with financial assets and liabilities in foreign currency and monetary gold	15,312	9,633
Total results on operations with financial assets and liabilities in foreign currency and monetary		
gold	95,144	(43,441)

# 19. Results on operations with financial instruments at fair value through profit or loss

	2020	2019
		(UAH million)
Foreign securities at fair value through gains or losses		
Interest income	8,708	7,275
Unrealized gains allocated to revaluation reserve for financial instruments at fair value	7,517	4,268
Unrealized losses covered by revaluation reserve for financial instruments at fair value	(166)	(18)
Unrealized losses not covered by revaluation reserve for financial instruments at fair value	(358)	(269)
Total unrealized results on foreign securities at fair value through profit or loss	6,993	3,981
Realized results on foreign securities measured at fair value through profit or loss (previously unrealized results of the current year that were realized)	2,182	1,747
Total results on foreign securities at fair value through profit or loss:	17,883	13,003
Derivative financial instruments		
Unrealized gains allocated to revaluation reserve for financial instruments at fair value	184	427
Unrealized losses not covered by revaluation reserve for financial instruments at fair value	(207)	(1)
Total amount of unrealized results on derivative financial instruments	(23)	426
Realized result on derivative financial instruments (previously unrealized results of the current year that were realized)	155	7
Total amount of results on derivative financial instruments	132	433
Property rights on loan agreements repossessed by the NBU		
Realized results (previously unrealized results of the current year that were realized)	(2)	(5)
Total results on property rights on loan agreements repossessed by the NBU	(2)	(5)
Total results on transactions with financial instruments at fair value with the recognition of revaluation result in profit or loss	18,013	13,431

In 2020, interests received on foreign securities included in the net increase of foreign securities in the consolidated cash flow statement amounted to UAH 8,436 million (in 2019 – UAH 6,037 million).

# 20. Gains/(losses) on reversal of impairment/(impairment) of financial and nonfinancial assets

Gains /(losses) on reversal of impairment/(impairment) of financial and nonfinancial assets:

	2020	2019
		(UAH million)
Gains on reversal of impairment of deposits in foreign currency at amortized cost	9	16
Gains /(losses) on reversal of impairment/(impairment) on debt securities of other government institutions at amortized cost	112	(189)
Gains on reversal of impairment on loans to banks and other borrowers	91	1,841
Gains on reversal of impairment on main interest rate financial assets	212	1,668
Impairment losses from receivables	(3)	(5)
Impairment losses from other nonfinancial assets	_	(176)
Impairment losses from other assets	(3)	(181)

## Section II.IV. Fair Value of Financial Assets and Liabilities

## 21. Fair Value of Financial Assets and Liabilities

The market where the NBU usually performs transactions on sale of asset or transfer of liability is deemed to be the principal market, or, in the absence of principal market, the most favorable one. The NBU should have access to the principal or the most favorable market as of the date of evaluation. The NBU assesses a fair value of asset or liability on assumptions the market participants would use when forming the asset or liability price, and assuming that the market participants act in their economic interests.

If the principal market for an asset or liability exists, a fair valuation represents a price on such market (irrespective of the fact whether the price is open directly, or its estimate was obtained according to another evaluation methodology), even if the price in other market is potentially more favorable as of the date of evaluation.

To define a fair value of financial instruments regarding which no information on market prices is available from external sources, such methods of evaluation are used as discounted cash flow and analysis of financial information on investment objects. The use of evaluation methods may require the use of assumptions not supported with market data. In these consolidated financial statements the information on assumptions is disclosed in the cases when the replacement of such assumption with a possible alternative option may lead to substantial change in amounts of profits, income, losses, total amount of assets or liabilities.

The NBU uses the evaluation methods in conformity with the circumstances and for which the data are sufficient to evaluate fair value, using at maximum the appropriate open inputs and minimizing the use of confidential inputs.

All assets and liabilities whose fair value is assessed or disclosed in consolidated financial statements are classified within the hierarchy of fair value levels specified below, on the basis of the lowest level inputs which are substantial for fair valuation in general:

- Level 1 quoted price of the similar assets or liabilities in active market (without any adjustments)
- Level 2 evaluation models in which the inputs substantial for fair valuation in general and belonging to the lowest hierarchal level are directly or indirectly observable in the market
- Level 3 evaluation models in which the inputs substantial for fair valuation in general and belonging to the lowest hierarchal level are not observable in the market.

The NBU determines the estimated fair value of financial assets and liabilities using available market information, where it exists, and the appropriate evaluation methodologies. However, professional judgment is necessarily required to interpret the market data in order to measure the fair value. Given the low activity in the financial market of Ukraine, the estimated fair value may not be fully

reflective of the value that could be realized by the NBU in the current circumstances.

#### Financial Assets and Liabilities at Fair Value.

Financial instruments carried at fair value include foreign securities and derivative financial instruments.

The fair value of these securities is defined on quoted prices in the active market (Level 1 inputs), other quotations from trading information systems (Level 2 inputs), or in the absence of information on quoted prices in the active market, the fair value is based on an income approach and Level 3 inputs (the yield of the securities during their initial placement by the issuer and the assumption that the yield will remain unchanged until the maturity date of the relevant securities, taking into account their short maturities).

The fair value of derivative financial instruments (futures, government derivatives) is determined on the basis of quoted prices in an active market (Level 1 input).

#### Financial Assets and Liabilities at Amortized Cost.

The NBU has determined that the fair value of certain financial assets and liabilities at amortized cost does not materially differ from their carrying value for the purposes of disclosing the fair value. These financial assets and liabilities include funds and deposits in foreign currencies, SDR holdings and IMF quota contributions, other financial assets, banknotes and coins in circulation, accounts of banks, accounts of the government and other institutions, the NBU certificates of deposit and liabilities to the IMF, and other financial liabilities.

Financial instruments carried at amortized cost, the fair value of which may differ significantly from their carrying values, include domestic securities, domestic public debt in domestic currency, and loans to banks and other borrowers. None of these financial instruments have an active market.

For the purposes of disclosing in the consolidated financial statements, the fair values of financial assets and liabilities for which no active market exists, the NBU estimates the fair values of such assets and liabilities using the discounted cash flow method (income approach). The said model takes into account future interest payments and principal repayments, the repayment period, and the discount rate.

the NBU estimates the fair value of domestic securities on the basis of income approach and the following information:

for long-term inflation-indexed government bonds, Level 2 inputs (spot rates calculated on the basis of the zero-coupon yield curve built using data from actually concluded and executed domestic government debt securities transactions, using the Svensson parametric model, and the actual consumer price index calculated for one month and compared to the previous month over the period from March to November 2020), and Level 3 inputs (the December 2020 FOCUSECONOMICS consensus forecast of consumer price indices for the next five years and target consumer price indices established by the NBU for the period from year 6 to year 30)

for other Ukrainian government bonds, Level 2 inputs (spot rates calculated on the basis of the zero-coupon yield curve built using data from actually concluded and executed domestic government debt securities transactions using the Svensson parametric model).

for bonds of other state institutions, Level 2 inputs (spot rates calculated on the basis of the zero-coupon yield curve built using data from actually concluded and executed agreements on domestic government debt securities using the Svensson parametric model) and Level 3 inputs (risk premiums of

securities compared to the risk of domestic government debt securities determined with the use of expert judgment at the level of 1,313 basis points as of 31 December 2019, taking into account the availability of government guarantees in respect of those securities).

To measure the fair value of internal government debt in domestic currency, the NBU's weighted average rate on all refinancing instruments (Level 3 input) is used as the discount rate.

As of 31 December 2020, the NBU applied the market rate (the NBU's key policy rate) as the discount rate used to measure the fair value of loans to banks and other borrowers. As of 31 December 2019, the NBU applied the market rate (the NBU's key policy rate plus 1.5%) as of the calculation date (Level 3 inputs) as the discount rate used to measure the fair value of loans to banks and other borrowers.

#### The discount rates used are as follows:

	2020	2019
	Discount rate, in % per annum	Discount rate, in % per annum
Domestic securities in domestic currency:		
domestic government bonds	7.45–11.59	7.43–13.01
bonds of other government institutions	-	28.91
Domestic public debt in domestic currency (1994–1996)	6.08	14.51
Loans to banks and other borrowers in domestic currency	6.00	15.0
Claims on bonds of other government institutions	10.32	_

The following table summarizes the carrying amounts and estimated fair values of the financial assets that do not appear in the NBU's consolidated statement of financial position at their fair values:

	2020		2019		
	Carrying amount	Fair value Carrying amount Fa		Fair value	
				(UAH million)	
Domestic securities in domestic currency:					
domestic government debt securities	334,128	315,282	345,440	332,362	
bonds of other government institutions	-	-	764	824	
Total domestic securities not measured at fair value	334,128	315,282	346,204	333,186	
Domestic public debt	1,635	1,876	1,727	1,307	
Loans to banks and other borrowers	66,930	67,229	13,843	14,068	
Claims under bonds of other government institutions	907	920	-	-	

Taking into account that fair value estimates are based on certain assumptions, it should be noted that the information provided above may not be fully reflective of the value that could be realized.

The fair value of financial instruments was categorized as follows:

	2020			2019			
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3	
					(in l	JAH million)	
Assets measured at fair value:							
Funds and deposits in foreign currency (futures)	8	-	-	8	-	-	
Foreign securities carried at fair value	521,245	125,534	24,999	429,937	41,642	33,400	
Domestic securities measured at fair value:							
in foreign currency							
Government derivatives	1,273	-	-	987	-	-	
Assets for which fair value is disclosed:							
Domestic securities in domestic currency:							
domestic government debt securities	-	184,466	130,816	-	199,209	133,153	
bonds of other government institutions	-	-	-	-	-	824	
Domestic public debt	_	-	1,876	-	-	1,307	
Loans to banks and other borrowers	-	-	67,229	-	-	14,068	
Claims under bonds of other government							
institutions	-	-	920	-	-	-	

In 2020, there were no material transfers of financial instruments between Levels 1 and 2 of the fair value hierarchy. In 2020, there were no transfers of financial instruments to or from Level 3 of the fair value hierarchy.

Long-term inflationary domestic bonds the fair values of which are disclosed are included in Level 3 of the fair value hierarchy.

The change in the fair value of foreign securities that are measured at the reporting date at fair value, and are included in Level 3 of the fair value hierarchy, is presented as follows:

	The fair value of foreign securities at fair value through profit or loss and are attributed to Level 3 of the fair value hierarch
	(UAH million
Foreign securities as of 1 January 2019	40,307
Expenses	(6,113)
Purchases of foreign securities	37,364
Redemptions of foreign securities	(38,158)
Foreign securities as of 31 December 2019	33,400
Income	6,806
Purchases of foreign securities	28,701
Redemptions of foreign securities	(43,908)
Foreign securities as of 31 December 2020	24,999

Income and expenses from change in fair value of foreign securities evaluated as of the reporting date and assigned to the 3rd level of fair value assessment are included in profits or losses from transactions with financial asset and liabilities in foreign currencies and monetary gold, and profits or losses from transactions with financial instruments at fair value through profit or loss of the consolidated statement of profit or loss and other comprehensive income (Note 18 and 19 respectively).

The average weighted modified duration under financial assets at fair value that are included in Level 3 of the fair

value hierarchy (except for the equity instruments at fair value through profit or loss) was 0.48 as of 31 December 2020 (0.36 as of 31 December 2019). An increase in the yield rates used to determine the fair value of these financial assets as of 31 December 2020 (Level 3 inputs) by 1 basis point would decrease the fair value of the relevant assets by UAH 120 million (by UAH 121 million as of 31 December 2019), while a decrease in these yield rates by 1 basis point would increase the fair value of these assets by UAH 120 million (UAH 121 million as of 31 December 2019).

## Section III. Risk management

## 22. Financial Risk Management

The NBU manages its financial risks in order to limit potential losses of the NBU's financial assets, fulfill its financial obligations in due time, and protect its capital to achieve its strategic goals and effectively perform its functions, as set forth in the Ukrainian Law *On the National Bank of Ukraine*, as well as supporting its institutional capacity and independence.

Financial risk management processes are broken down into the following stages:

1) setting up a system of financial risk management

identifying adverse events/financial risks in the NBU's processes/products

3) measuring financial risks

4) deciding on and taking measures in response to financial risks (addressing financial risks)

- 5) controlling risks
- 6) communicating and reporting risks

7) monitoring the system of financial risk management.

The NBU detailed the stages of financial risk management processes in its process procedures and other executive orders related to financial risk management.

The NBU Board is responsible for implementing the risk management system and ensuring that NBU risks are managed.

In accordance with the Ukrainian Law *On the National Bank* of *Ukraine*, the NBU Board established an asset and liability management committee, and charged it with managing the central bank's assets and liabilities, including Ukraine's foreign exchange reserves, as well as with monitoring risks arising from, and profits or losses incurred from, transactions with NBU assets and liabilities.

The NBU Board or the Asset and Liability Management Committee, within the powers delegated to it by the NBU Board, choose and approve measures in response to financial risks (address financial risks) based on proposals submitted by the NBU units that carry out transactions with financial instruments and by the Office for Financial and Operational Risks. These measures are chosen and approved through taking decisions on financial risk management and/or through outlining such measures in the central bank's regulations and/or executive orders.

The NBU units that are responsible for carrying out and/or carry out transactions with financial instruments are the first

line of defense in financial risk management processes. These units have been charged with identifying and measuring financial risks, deciding on and taking measures in response to financial risks, and reporting financial risks that arise from the operations that fall under their mandate.

The Financial Risk Division, which is a part of the Office for Financial and Operational Risks, is the second line of defense in financial risk management processes. This division is responsible for:

1) providing methodological, coordinative and logistical support for the central bank's financial risk management processes, among other things, through updating financial risk management policies

2) developing and supporting procedures and methodologies for measuring financial risks

3) overseeing, monitoring, and conducting an independent analysis of financial risks at the level of the central bank's second line of defense

4) analyzing, on request, new operations with financial instruments, new financial instruments, and changes to operations involving financial instruments so as to see how they could affect the NBU's financial risks, and making recommendations on responses to identified financial risks (addressing risks)

5) assessing the NBU's financial risk profile

6) reporting the NBU's financial risks to the central bank's Asset and Liability Management Committee.

The NBU's financial risks are grouped as follows:

- financial risks related to the policies determined and conducted by the NBU. These risks arise from financial instruments and are related to the central bank's performance of its main function and other functions, as set forth in Articles 6 and 7 of the Ukrainian Law On the National Bank of Ukraine, with the exception of Article 7 paragraph 15 of the Ukrainian Law On the National Bank of Ukraine
- financial risks arising from Ukraine's international (foreign exchange and gold) reserves
- financial risks arising from the management of the pension assets of the NBU Corporate Nonstate Pension Fund
- other financial risks of the NBU.

The measures the NBU takes in response to financial risks depend on the central bank's tolerance to certain risk groups.

The main measures the NBU relies on to address financial risks are as follows:

1) avoiding or preventing a financial risk by taking a conscious decision not to carry out operations or use financial instruments that pose risks to the central bank, where such risks exceed the level of the NBU's tolerance towards the group of risks in question

2) mitigating or decreasing financial risks through:

- diversification
- setting limits on the quantitative indicators of risks
- establishing the conditions and rules for the qualitative indicators of risks
- using various types of collateral to make sure that borrowers or counterparties discharge their obligations, and adjusting the fair value of such collateral, taking into account risk discounts or adjusting factors

3) using hedges to transfer financial risks

4) accepting financial risks through making provisions and covering financial risks with the NBU's own funds.

The NBU distinguishes between credit, market and liquidity risks based on the factors that generate the respective financial risks

#### **Credit Risk**

Credit risk is the possibility of incurring losses, additional expenses or receiving less income due to the failure of a borrowing bank, or the failure of any other borrower or counterparty to discharge their obligations to the NBU in accordance with the terms and conditions agreed. Credit risk can manifest itself through:

default risk, arising from the failure of а counterparty/issuer/borrower to discharge their obligations to the NBU. This includes pre-settlement risk (the possibility that a counterparty will fail to meet their obligations to the NBU, resulting in default before the settlement date), and settlement risk (the possibility that, once the NBU has discharged its obligations to a counterparty, the counterparty will fail to meet their obligations to the NBU, resulting in default on the settlement date)

the risk of a counterparty/issuer credit rating downgrading below the minimum acceptable credit rating that allows to include the assets in its international (foreign exchange and gold) reserves.

#### **Market Risks**

Market risk is defined as the possibility of incurring losses, additional expenses or receiving less income due to unfavorable movements in market prices, such as exchange rates, interest rates, and prices for financial instruments and goods. Market risks can manifest themselves through:

currency risk, which is defined as a market risk arising from unfavorable fluctuations in exchange rates; interest rate risk is a market risk arising from unfavorable changes in market interest rates that adversely affect the value of debt securities or other fixed-income instruments, as well as the value of derivative financial instruments (derivatives)

credit spread risk is a market risk arising from a widening (increase) in credit spreads between the yield to maturity of a fixed-income security or another financial instrument and riskfree yields to maturity with a similar duration, which has an adverse impact on the market value of such instruments. A widening in a credit spread can result from a downgrading in the credit rating or a decrease in the credit quality of the issuer of a financial instrument, or from overall changes in market conditions

equity risk, a market risk arising from unfavorable changes in the market value of non-fixed-income shares and other securities

commodity risk, a market risk arising from unfavorable changes in the market value of commodities, including precious metals, such as gold

volatility risk, a market risk arising from unfavorable changes in the volatility of market prices, interest rates, market indices, and exchange rates, which decrease the value of options, including those that have been embedded in other financial instruments.

Among the market risks, the foreign exchange and interest rate risks influence the NBU most.

The table below shows an analysis of the sensitivity of the NBU's positions to currency risk, based on the assumption of a 20% increase/decrease in the exchange rates of the U.S. dollar, Euro, SDR and other currencies against the hryvnia in 2020 and 2019. The analysis factors in only the foreign

currency amounts (apart from nonmonetary assets) that were available at the end of the period. Exchange rates adjusted by 20% in relation to those that were in effect in late 2020 and 2019 were used to translate those amounts into hryvnias.

The effect of exchange rate changes on profit or loss and the profit for year is presented as follows:

	31 Decembe	31 December 2020		
				(UAH million)
	+20%	-20%	+20%	-20%
USD	120,227	(120,227)	89,913	(89,913)
EUR	12,720	(12,720)	10,649	(10,649)
SDRs	(38,642)	38,642	(34,138)	34,138
GBP	3,130	(3,130)	2,741	(2,741)
Other currencies	7,481	(7,481)	6,714	(6,714)

The following table summarizes sensitivity analysis of NBU positions to interest rate risk. Impact on profit or loss and the profit for the year is presented as follows:

	31 December 20	20	31 December 2019		
				(UAH million)	
	+100 bp	-100 bp	+100 bp	-100 bp	
Sensitivity of interest-bearing financial assets	3,044	(3,044)	2,891	(2,891)	
Sensitivity of interest-bearing financial liabilities	(3,597)	3,597	(3,131)	3,131	
Net impact on profit or loss and the distributable profit	(553)	553	(240)	240	

Sources of interest rate risk are identified through analyzing the existing composition of interest-bearing assets and liabilities. The NBU assesses interest rate risk using an analysis of its sensitivity to interest rate movements, i.e. changes in the market value of instruments and portfolios as a result of movements in the yield curve by a certain number of basis points. In accordance with the relevant methodology, the scenarios used included a parallel shift in the entire curve by 1 percentage point (+/-100 basis points). Sensitivity to interest rate risk is estimated on the basis of a scenario according to which all interest rate curves are believed to change in the same manner for all financial instruments and currencies. The assessments take into account interest rate risk arising from all of the NBU's positions in instruments with fixed and floating interest rates, as defined by the respective model.

#### Liquidity risk

The NBU breaks liquidity risk down into:

the liquidity risk of Ukrainian international (foreign exchange) reserves. This risk can arise when the NBU has difficulties in quickly selling or recalling a large amount of assets in which Ukrainian international (foreign exchange) reserves are held.

Sometimes unfavorable market conditions can also decrease the value of such assets

FX liquidity risk, which can arise when the NBU is unable to meet is foreign currency obligations as they fall due.

Due to the fact that according to paragraph 2, Article 7 of the Ukrainian Law *On the National Bank of Ukraine*, the NBU has a monopoly on issuing Ukraine's national currency and is responsible for arranging cash circulation, the NBU is not exposed to national currency liquidity risk. This risk is defined as the central bank's possible failure to meet its national currency obligations as they fall due.

The NBU manages its liquidity risk through:

- maintaining certain amounts of cash, as required by the relevant regulations, on its correspondent accounts
- holding sufficient amounts of highly liquid financial instruments that can be easily monetized
- setting requirements on the liquidity of the assets in which international (foreign exchange) reserves are held.

For a detailed assessment of financial risks, see Notes 23 to 27.

## 23. Analysis of Financial Assets and Liabilities by Geographical Concentration Risk

As of 31 December 2020, the geographical concentration risk of the NBU's financial assets and liabilities was presented as follows:

	Ukraine	OECD	IMF	Other	Total
					(UAH million)
Financial assets					
Funds and deposits in foreign currency	22,164	96,173	-	2	118,339
Foreign securities	-	600,972	-	70,806	671,778
SDR holdings	-	-	128	-	128
Domestic securities	335,401	-	-	-	335,401
Loans to banks and other borrowers	66,930	-	_	-	66,930
Domestic public debt	1,635	-	_	-	1,635
IMF quota contributions	_	-	81,927	-	81,927
Other financial assets	1,169	25	121	-	1,315
Total financial assets	427,299	697,170	82,176	70,808	1,277,453
Financial liabilities					
Banknotes and coins in circulation	558,694	-	-	-	558,694
Accounts of banks	50,017	-	_	-	50,017
Accounts of government and other institutions	70,663	1	-	-	70,664
Certificates of deposit issued by the NBU	163,485	-	_	-	163,485
Borrowings received	-	2,827	-	-	2,827
Liabilities to the IMF apart from quota contributions	_	_	193,471	_	193,471
Liabilities to the IMF in respect of quota contributions	_	_	81,917	_	81,917
Other financial liabilities	747	113	_	-	860
Total of financial liabilities	843,606	2,941	275,388	-	1,121,935
Net balance sheet position	(416,307)	694,229	(193,212)	70,808	155,518
Off-balance sheet assets and liabilities					
Assets receivable under swap agreements	_	24,900	_	_	24,900
Loan commitments to banks and other borrowers	2,000	_ ,,000	_	_	2,000
Assets payable under swap agreements	_,000	25,006	_	_	25,006
Net off-balance sheet position	(2,000)	(106)	_	_	(2,106
Net position	(418,307)	694,123	(193,212)	70,808	153,412

As of 31 December 2019, financial assets and liabilities of the NBU by geographical risk concentration were as follows:

	Ukraine	OECD	IMF	Other	Tota
					(UAH million
Financial assets					
Funds and deposits in foreign currency	589	88,819	-	112	89,520
Foreign securities	-	435,146	-	69,833	504,979
SDR holdings	-	-	234	-	234
Domestic securities	347,191	-	-	-	347,19 <sup>,</sup>
Loans to banks and other borrowers	13,843	-	-	-	13,84
Domestic public debt	1,727	-	-	-	1,72
IMF quota contributions	-	-	65,894	-	65,894
Other financial assets	88	21	127	-	236
Total financial assets	363,438	523,986	66,255	69,945	1,023,624
Financial liabilities					
Banknotes and coins in circulation	425,256	-	_	-	425,25
Accounts of banks	78,441	-	_	3	78,444
Accounts of government and other institutions	38,981	1	_	-	38,98
Certificates of deposit issued by the NBU	151,932	_	_	_	151,93
Borrowings received	-	2,369	-	-	2,36
Liabilities to the IMF apart from quota contributions	_	_	171,059	_	171,059
Liabilities to the IMF in respect of quota contributions	-	_	65,886	-	65,886
Other financial liabilities	577	95	_	-	672
Total financial liabilities	695,187	2,465	236,945	3	934,60
Net balance sheet position	(331,749)	521,521	(170,690)	69,942	89,024
Off-balance sheet assets and liabilities					
Loan commitments to banks and other borrowers	2,000	_	_	-	2,00
Net off-balance sheet position	(2,000)	_	_	_	(2,000
Net position	(333,749)	521,521	(170,690)	69,942	87,024

## 24. Credit Risk

The following information provides gross carrying amounts of the NBU's financial assets assessed by impairment stages and credit ratings of counterparties assigned by the following international rating agencies: Fitch Ratings, Moody's, and Standard & Poor's. The following disclosures as of 31 December 2020 and 2019 consider a lower of the two best ratings assigned to an entity by the above rating agencies. The ratings are listed below as per coding of the rating agency of Fitch Ratings using the rating correspondence table of Bloomberg.

The information below as of 31 December 2020:

	Credit rating	Total	% in the financial assets' item	Stage 1	Stage 2	Stage 3
					(U/	AH million)
Funds and deposits in foreign currency						
demand deposits	AAA	37,931	32.1	37,931	-	-
	AA+	8	0.0	8	-	-
	AA	4,955	4.2	4,955	-	-
	AA-	27	0.0	27	-	-
	A+	16,715	14.1	16,715	-	-
	A	10,677	9.0	10,677	-	-
term deposits	AAA	10,674	9.0	10,674	-	-
	AA+	1,414	1.2	1,414	-	-
	AA	11,873	10.0	11,873	-	-
	AA-	1,902	1.6	1,902	-	-
	Risk-					
foreign currency cash	free	22,164	18.8	22,164	-	-
Total funds and deposits in foreign currency		118,340	100.0	118,340	-	-
Foreign securities:						
government bonds	AAA	407,161	60.6	407,161	-	-
5	AA+	7,474	1.1	7,474	-	-
	AA-	8,123	1.2	8,123	-	-
	A+	9,673	1.4	9,673	_	_
Securities issued by international agencies, banks and						
other issuers:	AAA	46,370	6.9	46,370	-	-
	AA+	10,192	1.5	10,192	-	-
	AA	20,087	3.0	20,087	-	-
	AA-	17,696	2.6	17,696	-	-
	A+	56,987	8.5	56,987	-	-
	А	78,712	11.7	78,712	-	-
	A-	9,182	1.5	9,182	-	-
Total foreign debt securities		671,657	100.0	671,657	-	-
Domestic securities:						
government securities	В	335,401	100.0	335,401	-	-
Total domestic securities		335,401	100.0	335,401	-	-
Loans to banks and other borrowers						
loans to banks	В	3,800	3.7	3,800	-	-
	B-	37,424	36.1	37,424	-	-
	Unrated	62,517	60.2	20,630	-	41,887
loans to other borrower	Unrated	38	0.0	-	-	38
Total loans to banks and other borrowers	-	103,779	100.0	61,854	-	41,925
Domestic public debt	В	1,635	100.0	1,635	-	-
Other financial assets	AAA	121	8.6	121	-	-
	AA	2	0.1	2	-	-
	A	23	1.6	23	-	-
	Unrated	1,266	89.7	283	983	-
Total other financial assets		1,412	100.0	429	983	-

#### The information below as of 31 December 2019:

	Credit rating	Total	% in the financial assets' item	Stage 1	Stage 2	Stage 3
					(U)	AH million)
Funds and deposits in foreign currency						
demand deposits	AAA	8,568	9.6	8,568	-	_
	AA+	6	0.0	6	-	-
	AA	253	0.3	253	-	-
	AA-	2	0.0	2	-	-
	A+	2,705	3.0	2,705	-	-
	А	709	0.8	709	-	_
	A-	1,850	2.1	1,850	-	-
term deposits	AAA	8,299	9.3	8,299	-	-
	AA+	35,967	40.2	35,967	-	-
	AA-	13,966	15.5	13,966	-	-
	A+	187	0.2	187	-	-
	А	16,429	18.4	16,429		
foreign currency cash	Risk-free	589	0.6	589	-	-
Total funds and deposits in foreign currency		89,530	100.0	89,530	-	-
Foreign securities:						
government bonds	AAA	273,942	54.3	273,942	_	_
	AA+	5,190	1.0	5,190	-	-
	AA	9,690	1.9	9,690	_	_
	AA-	448	0.1	448	-	-
	A+	3,969	0.8	3,969	-	-
Securities issued by international agencies, banks and othe	r					
issuers:	AAA	32,487	6.4	32,487	-	-
	AA+	5,158	1.0	5,158	-	-
	AA	14,140	2.8	14,140	-	-
	AA-	22,312	4.4	22,312	-	-
	A+	71,513	14.2	71,513	-	-
	А	59,969	11.9	59,969	-	-
	A-	6,040	1.2	6,040	-	-
Total foreign debt securities		504,858	100.0	504,858	-	-
Domestic securities:						
government securities	В	346,427	99.7	346,427	-	-
corporate securities	Unrated	953	0.3	-	-	953
Total domestic securities		347,380	100.0	346,427	-	953
Loans to banks and other borrowers						
loans to banks	B-	7,712	14.9	-	-	7,712
	Unrated	44,008	85.0	104	-	43,904
loans granted to the Deposit Guarantee Fund	Unrated	-	-	-	-	-
loans to other borrower	Unrated	38	0.1	-	-	38
Total loans to banks and other borrowers	_	51,758	100.0	104	-	51,654
Domestic public debt	В	1,727	100.0	1,727	-	-
Other financial assets	AAA	127	50.0	127	-	-
	AA	3	1.2	3		
	Unrated	124	48.8	124	-	-
Total other financial assets		254	100.0	254	-	-

Ratings of loans granted to banks to support their liquidity that do not have international ratings assigned are determined in accordance with the internal methodology of the NBU. UAH 2,435 million, B - UAH 1,259 million (as of 31 December 2019, UAH 104 million had the internal ratings C).

The NBU determines internal ratings as follows:

As of 31 December 2020, the gross carrying value balance in the amount of UAH 20,630 million had the internal rating of AA in the amount of UAH 1,265 million, A – at the amount of UAH 8,267 million, BBB – UAH 7,404 million, BB –

AAA rating is the highest grade of a counterparty's creditworthiness. The counterparty's financial position is assessed as strong and stable in a long-term perspective,

and the ability to repay on a timely basis and in full the interest and principal on debt obligations is very high.

BBB rating is a medium grade of a counterparty's creditworthiness. The counterparty's financial position is assessed as strong and stable in a mid-term perspective, the counterparty's debt obligations have a higher risk of nonpayment compared to counterparties with higher ratings. However, difficulties may arise with timely and full repayment of the interest and principal on debt obligations in the event of occurrence of unfavorable changes in commercial, financial, and economic conditions, although, in the nearest future, a probability of the counterparty's failure to meet its debt obligations is treated as insignificant.

BB rating is a medium grade of a counterparty's creditworthiness The counterparty's financial position is assessed as satisfactory and stable in a short-term perspective, the counterparty is able, at the date of assessment, to repay the interest and principal on debt obligations, but has a higher probability of default on obligations than the counterparty with BBB rating.

B rating is a grade of a counterparty's creditworthiness that is somewhat lower than medium. Key indicators of the counterparty's financial position are assessed as satisfactory and stable in a short-term perspective, it has a sufficient level of financial reliability. Timely and complete payments on debt obligations mostly depend on commercial, financial, and economic conditions.

CCC rating is a lower than medium grade of a counterparty's creditworthiness. Key indicators of the counterparty's financial position are assessed as satisfactory, but their

stability in a short-term perspective is doubtful, it has a low level of financial reliability. The counterparty bank's ability to pay is fully dependent on domestic economic situation.

CC rating is a low grade of a counterparty's creditworthiness. Key indicators of the counterparty's financial position are assessed as satisfactory, but their deterioration in a shortterm perspective is considered as highly probable, it has a very low level of financial reliability. The counterparty bank's ability to pay is fully dependent on domestic economic situation.

C rating is a very low grade of a counterparty's creditworthiness, which is considered to be pre-default. The counterparty's financial position is unstable and is assessed as unsatisfactory. Repayments of interest and principal on debt obligations may be suspended by the counterparty without obtaining a consent of lenders on the debt restructuring before maturities. The counterparty bank's ability to pay is fully dependent on domestic economic situation.

Domestic securities without international ratings assigned include corporate bonds of state-owned entities whose ratings are limited by the sovereign rating of Ukraine.

Total loans granted to five banks with the highest level of credit exposures as of 31 December 2020 amounted to UAH 49,213 million (as of 31 December 2019: UAH 37,114 million), or 69% (31 December 2019 – 69%) of total loans to banks and other borrowers, before allowance. The allowance recognized on the loans granted to five banks amounted to UAH 21,051 million as of 31 December 2019 (31 December 2019 – UAH 26,185 million).

The information below on net credit risk by types of pledged loan collateral as of 31 December 2020:

	Maximum permissible credit risk	Collateral value	Net credit risk (loans to banks)	Net credit risk (domestic government debt)
				(UAH million)
Loans secured by:				
real assets	3,960	6,682	3,960	-
securities	53,194	96,326	117	-
other collateral types	9,776	11,641	1,004	-
Unsecured loans	1,635	-	-	1,635
Total loans to banks and other borrowers	68,565	114,649	5,081	1,635

#### The information below on net credit risk by types of pledged loan collateral as of 31 December 2019:

	Maximum permissible credit risk	Collateral value	Net credit risk (loans to banks)	Net credit risk (domestic government debt)
				(UAH million)
Loans secured by:				
real assets	11,397	28,758	11,397	-
securities	95	102	-	-
other collateral types	2,351	3,706	2,342	-
Unsecured loans	1,727	-	-	1,727
Total loans to banks and other				
borrowers	15,570	32,566	13,739	1,727

Maximum credit risk exposure is represented by the carrying amounts of loans outstanding at the reporting date. Collateral accepted as security is the fair value of collateral used by the NBU in the calculation of allowance at the reporting date.

For banks and other borrowers being in Stage 3 of impairment, the cash flows for which are expected from sale

of collateral property only, net credit exposure is equal to the maximum credit exposure.

For banks and other borrowers being in Stage 1 and 2 of impairment, net credit exposure is calculated as the difference between the maximum credit exposure and value of the pledge accepted as collateral.

### 25. Foreign Currency Risk

As of 31 December 2020, the NBU had the following positions in currencies:

	UAH	USD	EUR	SDR	GBP	Other	Nonmonetary	Tota
								(UAH millior
Financial assets								
Funds and deposits in foreign								
currencies	-	64,633	27,186	-	1,671	24,849	-	118,33
Foreign securities	-	577,178	48,851	-	13,981	31,647	121	671,77
SDR holdings	-	-	-	128	-	-	-	12
Domestic securities	334,128	1,273	-	-	-	-	-	335,40
Loans to banks and other borrowers	66,930	-	-	-	-	-	-	66,93
Domestic public debt	1,635	-	-	-	-	-	-	1,63
IMF quota contributions	-	-	-	81,927	-	-	-	81,92
Other financial assets	1,168	-	2	121	-	24	-	1,31
Total financial assets	403,861	643,084	76,039	82,176	15,652	56,520	121	1,277,45
Financial liabilities								
Banknotes and coins in circulation	558,694	_	_	_	_	_	_	558,69
Accounts of banks	38,871	6,063	5,077	-	1	5	-	50,0
Accounts of government and other								
institutions	13,537	53,409	1,682	-	-	2,036	-	70,6
Certificates of deposit issued by the								
NBU	163,485	_	-	-	-	-	-	163,4
Borrowings received	_	2,827	-	-	-	-	-	2,8
Liabilities to the IMF, apart from IMF								
quota contributions	_	_	-	193,471	_	-	_	193,4
Liabilities to the IMF in respect of				,				,
quota contributions	_	_	_	81,917	_	-	_	81,9 <sup>,</sup>
Other financial liabilities	841	10	9	_	-	-	_	8
Total financial liabilities	775,428	62,309	6,768	275,388	1	2,041	_	1,121,9
Net balance sheet position	(371,567)	580,775	69,271	(193,212)	15,651	54,479	121	155,5 <sup>,</sup>
Off-balance sheet assets and liabilities								
Assets receivable under swap								
agreements	2,280	22,620	-	-	_	-	-	24,9
Loan commitments to banks and								
other borrowers	2,000	_	_	_	_	_	_	2,0
Assets payable under swap								
agreements	_	2,262	5,672	_	_	17,072	-	25,0
Net off-balance sheet position	280	20,358	(5,672)	-	_	(17,072)	-	(2,10
Net position	(371,287)	601,133	63,599	(193,212)	15,651	37,407	121	153,4

As of 31 December 2019, the NBU had the following positions in currencies:

	UAH	USD	EUR	SDR	GBP	Other	Nonmonetary	Tota
								(UAH millior
Financial assets								
Funds and deposits in foreign								
currencies	-	78,875	7,028	-	1,596	2,021	-	89,52
Foreign securities	-	404,754	56,432	-	12,109	31,563	121	504,97
SDR holdings	-	-	-	234	-	-	-	23
Domestic securities	346,204	987	-	-	-	_	-	347,19
Loans to banks and other borrowers	13,843	-	-	-	-	-	-	13,84
Internal state debt	1,727	-	-	-	-	_	-	1,72
IMF quota contributions	_	-	-	65,894	-	-	-	65,89
Other financial assets	88	-	21	127	-	-	-	23
Total financial assets	361,862	484,616	63,481	66,255	13,705	33,584	121	1,023,62
Financial liabilities								
Banknotes and coins in circulation	425,256	-	_	-	_	-	_	425,25
Accounts of banks	54,396	23,979	63	_	1	5	-	78,44
Accounts of government and other								
institutions	20,245	8,568	10,169	-	_	_	-	38,98
Certificates of deposit issued by the								
NBU	151,932	_	_	-	_	_	-	151,93
Borrowings received	_	2,369	-	-	-	_	-	2,36
Liabilities to the IMF apart from								
quota contributions	_	_	_	171,059	_	_	-	171,05
Liabilities to the IMF in respect of								
quota contributions	_	_	_	65,886	_	_	-	65,88
Other financial liabilities	526	134	5	_	-	7	-	67
Total financial liabilities	652,355	35,050	10,237	236,945	1	12	-	934,60
Net balance sheet position	(290,493)	449,566	53,244	(170,690)	13,704	33,572	121	89,02
Off-balance sheet assets and								
liabilities								
Loan commitments to banks and								
other borrowers	2,000	-	-	-		-	-	2,00
Net off-balance sheet position	(2,000)	-	-	-	-	-	-	(2,00
Net position	(292,493)	449,566	53,244	(170,690)	13,704	33,572	121	87,02

Assets and liabilities in other currencies mainly included positions in CHF, AUD, JPY, and CNY.

### 26. Interest Rate Risk

As of 31 December 2020, the NBU had the following structure of the weighted average interest rates by major currencies for monetary financial interest-bearing instruments. Interest rates on each financial instrument has been calculated as weighted-average contractual rates at the reporting date.

	UAH	USD	EUR	SDR	GBP	Other	Total weighted average interest rate
Financial assets							(%)
		0.40			0.00	0.07	
Term deposits in OECD	-	0.13			0.03	2.67	0.34
Foreign securities	-	0.31	-	-	0.10	1.69	0.35
SDR holdings	_	_	_	0.08	_	-	0.08
Domestic securities	9.55	-	-	-	-	-	9.55
Loans to banks and other borrowers	7.03	-	-	-	-	-	7.03
Domestic public debt	8.67	-	-	-	-	-	8.67
Financial liabilities		-	-	-	-	-	
Deposit Guarantee Fund	5.68	-	-	-	_	-	5.68
Certificates of deposit issued by the NBU	5.68	_	_	-	_	-	5.68
Borrowings received	-	3.10	-	-	-	-	3.10
Liabilities to the IMF, apart from IMF							
quota contributions	_	_	_	2.55	_	_	2.55

The sign "–" in the table above means that the NBU has no respective interest-bearing assets or liabilities in corresponding currency.

Also domestic securities include indexed government debt securities.

Interest is accrued at floating rates on SDR holdings and liabilities to the IMF (interest rates are reviewed on a weekly basis).

Interest rates used for accruing expenses on accounts of the Deposit Guarantee Fund are not fixed, and their amounts correspond to weighted average interest rates on demand deposits of individuals in the national currency.

Interest on foreign securities is accrued at both variable and fixed rates.

As of 31 December 2019, the NBU had the following structure of the weighted average interest rates by major currencies for monetary financial interest-bearing instruments. Interest rates on each financial instrument has been calculated as weighted-average contractual rates at the reporting date.

	UAH	USD	EUR	SDR	GBP	Other	Total weighted average interest rate
							(%)
Financial assets							
Term deposits in OECD	-	1.65	-	-	0.80	2.81	1.65
Foreign securities	-	1.78	0.04	-	0.76	1.90	1.57
SDR holdings	-	-	-	0.75	-	-	0.75
Domestic securities	10.44	-	-	-	-	-	10.44
Loans to banks and other borrowers	17.7	-	-	-	-	-	17.70
Domestic public debt	8.68	-	-	-	-	-	8.68
Financial liabilities							
Deposit Guarantee Fund	9.53	-	-	-	-	-	9.53
Certificates of deposit issued by the NBU	12.73	-	-	-	-	-	12.73
Borrowings received	-	4.88	-	-	-	-	4.88
Liabilities to the IMF apart from quota							
contributions	-	-	-	3.06	_	-	3.06

# Analysis of financial assets and liabilities by periods of interest rate repricing

The table below presents analysis of assets and liabilities by periods of interest rate repricing.

For financial assets and liabilities with fixed interest rates, classification was determined based on the contractual maturity date from the consolidated statement of financial position date. For assets and liabilities with variable interest rates, classification was determined taking into account the earlier of repricing period or maturity date.

As of 31 December 2020, financial assets and liabilities by periods of interest rate repricing were as follows:

	On demand and up to 1	1–3 months	3–12 months	1–5 years	Over 5 years	Non- interest	Tota
	month	montrio	montrio	youro	youro	bearing	
						(	UAH million)
Financial assets							
Funds and deposits in foreign currency	93,304	2,828	-	-	-	22,207	118,339
Foreign securities	23,012	65,646	144,594	432,452	5,953	121	671,778
SDR holdings	128	-	-	-	-	-	128
Domestic securities	872	4,126	161,149	48,036	119,945	1,273	335,401
Loans to banks and other borrowers	7,331	11,218	73	48,308	-	-	66,930
Domestic public debt	-	27	82	436	1,090	-	1,635
IMF quota contributions	-	_	-	-	-	81,927	81,927
Other financial assets	5	1	912	15	9	373	1,315
Total financial assets	124,652	83,846	306,810	529,247	126,997	105,901	1,277,453
Financial liabilities							
Banknotes and coins in circulation	_	_	_	_	_	558,694	558,694
Accounts of banks	_	_	_	_	_	50,017	50,017
Accounts of government and other							,
institutions	1,414	_	_	_	_	69,250	70,664
Certificates of deposit issued by the NBU	163,485	_	_	_	_	_	163,485
Borrowings received		2,827	-	-	-	-	2,827
Liabilities to the IMF, apart from IMF		_,0					_,•
quota contributions	192,640	_	_	_	_	831	193,471
Liabilities to the IMF in respect of quota	102,010					001	100,111
contributions	_	_	_	_	_	81,917	81,917
Other financial liabilities		_			_	860	860
Total financial liabilities	357,539	2,827	_	_	_	761,569	1,121,935
Net gap	(232,887)	81,019	306,810	529,247	126,997	(655,668)	155,518
							155,516
Cumulative gap	(232,887)	(151,868)	154,942	684,189	811,186	155,518	
Off-balance sheet assets and liabilities							
Contingent claims with fixed rate under							
interest rate swap	4	20	-	15,391	-	-	15,415
Contingent liabilities with floating rate							
under interest rate swap	15,391	_	-	-	-	-	15,391
Net gap	(15,387)	20	_	15,391	_	-	24
Cumulative gap	(15,387)	(15,367)	(15,367)	24	24	24	
Total net gap	(248,274)	81,039	306,810	544,638	126,997	(655,668)	155,542
		-		-			133,342
Total cumulative gap	(248,274)	(167,235)	139,575	684,213	811,210	155,542	

#### National Bank of Ukraine

#### As of 31 December 2019, financial assets and liabilities by periods of interest rate repricing were as follows:

	On demand and up to 1 month	1–3 months	3–12 months	1–5 years	Over 5 years	Non- interest bearing	Total
							UAH million)
Financial assets							
Funds and deposits in foreign currencies	83,721	4,086	_	_	_	1,713	89,520
Foreign securities	30,054	73,963	101,639	297,887	1,315	121	504,979
SDR holdings	234	-	-	_	_	_	234
Domestic securities	6,272	9,667	150,481	47,714	132,070	987	347,191
Loans to banks and other borrowers	6,442	_	_	7,401	_	_	13,843
Internal state debt	-	27	81	432	1,187	-	1,727
IMF quota contributions	_	_	_	_	_	65,894	65,894
Other financial assets	5	1	6	21	13	190	236
Total financial assets	126,728	87,744	252,207	353,455	134,585	68,905	1,023,624
	-	_	_	_	-	425,256	
Financial liabilities Banknotes and coins in circulation	_	_	_	_	_	425,256	425,256
Accounts of banks	-	-	-	-	-	78,444	78,444
Accounts of government and other	0.400					00.404	
Institutions	2,498	-	-	-	-	36,484	38,982
Certificates of deposit issued by the NBU	151,932	-	-	-	-	-	151,932
Borrowings received	-	2,369	-	-	-	-	2,369
Liabilities to the IMF apart from quota	170 170					0.07	171.050
contributions	170,172	-	-	-	-	887	171,059
Liabilities to the IMF in respect of quota							
contributions	-	-	-	-	-	65,886	65,886
Other financial liabilities	-	-	-	-	-	672	672
Total financial liabilities	324,602	2,369	-	-	-	607,629	934,600
Net gap	(197,874)	85,375	252,207	353,455	134,585	(538,724)	89,024
Cumulative gap	(197,874)	(112,499)	139,708	493,163	627,748	89,024	

As of 31 December 2020, a portion of foreign securities bearing variable interest rates amounted to 9.79% of the total portfolio (31 December 2019 – 13.15%).

### 27. Liquidity Risk

For the purposes of measuring liquidity risk, financial assets are grouped by their contractual term set as of the reporting date for receiving the cash flows to be repaid taking into account the period remaining as of the reporting date to the contractual date of the cash flows repayment. IMF quota contributions are presented as assets on demand, based on Article XXVI of the IMF Agreement, but such presentation does not mean that there are expectations that Ukraine will take advantage of this article. Financial liabilities are grouped by maturity taking into account the remaining contractual maturity as of the reporting date.

The amounts of financial assets and liabilities disclosed in the liquidity risk table below are the contractual discounted cash flows from financial instruments carried at fair value. Derivatives settled on a net basis are included at the net

amounts expected to be paid. Impaired loans are included at their carrying value based on the expected timing of cash inflows.

Foreign securities are included in the table taking into account the remaining contractual maturity as of the reporting date. Judging from historical data, this timing is not significantly different to the expected timing of disposal of such securities.

When the amounts payable are not fixed, such amounts are presented in the liquidity analysis taking into account the conditions at the reporting date. Foreign currency items are translated using the spot exchange rates at the reporting date.

#### The NBU's liquidity risk position as of 31 December 2020 was as follows:

	On demand and up to 1 month	1–3 months	3–12 months	1–5 years	Over 5 years	Maturity date not determined	Total
							(UAH million)
Financial assets							
Funds and deposits in foreign currency	115,511	2,828	_	-	-	_	118,339
Foreign securities	6,934	21,722	168,147	468,902	5,952	121	671,778
SDR holdings	128	_	-	-	-	_	128
Domestic securities	872	4,126	15,976	48,036	266,391	_	335,401
Loans to banks and other borrowers	2,251	11,751	4,425	48,503	_	_	66,930
Domestic public debt	-	27	82	436	1,090	-	1,635
IMF quota contributions	81,927	-	_	-	_	-	81,927
Other financial assets	43	4	1,071	24	16	157	1,315
Total financial assets	207,666	40,458	189,701	565,901	273,449	278	1,277,453
Financial liabilities							
Banknotes and coins in circulation	558,479	-	-	-	-	215	558,694
Accounts of banks	50,017	-	-	-	-	-	50,017
Accounts of government and other							
institutions	70,664	_	-	-	-	_	70,664
Certificates of deposit issued by the NBU	163,485	_	-	-	-	_	163,485
Borrowings received	-	_	-	2,827	-	_	2,827
Liabilities to the IMF, apart from IMF quota							
contributions	3	12,780	14,439	150,624	12,308	3,317	193,471
Liabilities to the IMF in respect of quota							
contributions	81,917	_	_	_	-	_	81,917
Other financial liabilities	103	9	44	206	_	498	860
Loan Commitments	2,000	-	-	-	-	-	2,000
Total financial liabilities	926,668	12,789	14,483	153,657	12,308	4,030	1,123,935
Liquidity gap arising from financial							
instruments	(719,002)	27,669	175,218	412,244	261,141	(3,752)	153,518
Cumulative liquidity gap	(719,002)	(691,333)	(516,115)	(103,871)	157,270	153,518	

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### Liquidity risk assessment of the NBU as of 31 December 2019 comprised the following:

	On demand and up to 1	1–3 months	3–12 months	1–5 years	Over 5 years	Maturity	Total
	month		monuis	years	years	date not	
						determined	(11411 million)
Financial assets							(UAH million)
Funds and deposits in foreign currency	85,433	4,087	_	-	-	_	89,520
Foreign securities	11,569	31,704	112,317	347,953	1,315	121	504,979
SDR holdings	234	_	-	_	_	_	234
Domestic securities	6,272	9,667	5,308	47,714	278,230	_	347,191
Loans to banks and other borrowers	473	250	3,441	9,679	_	_	13,843
Internal state debt	-	27	81	432	1,187	-	1,727
IMF quota contributions	65,894	_	-	-	-	-	65,894
Other financial assets	4	2	8	159	22	41	236
Total financial assets	169,879	45,737	121,155	405,937	280,754	162	1,023,624
Financial liabilities							
Banknotes and coins in circulation	425,041	-	-	-	-	215	425,256
Accounts of banks	78,444	_	-	-	-	_	78,444
Accounts of government and other							
institutions	38,982	_	-	-	-	_	38,982
Certificates of deposit issued by the NBU	151,932	_	-	-	-	_	151,932
Borrowings received	-	_	-	2,369	-	-	2,369
Liabilities to the IMF, apart from IMF quota							
contributions	2	8,543	7,659	123,521	28,666	2,668	171,059
Liabilities to the IMF in respect of quota							
contributions	65,886	_	-	-	-	-	65,886
Other financial liabilities	53	3	87	-	-	529	672
Loan commitments	2,000	_	-	-	-	-	2,000
Total financial liabilities	762,340	8,546	7,746	125,890	28,666	3,412	936,600
Liquidity gap arising from financial							
instruments	(592,461)	37,191	113,409	280,047	252,088	(3,250)	87,024
Cumulative liquidity gap	(592,461)	(555,270)	(441,861)	(161,814)	90,274	87,024	

The amounts stated in the tables below do not correspond to the amounts recorded in the consolidated statement of financial position, since the below information includes maturity analysis of financial liabilities which reflects the total amount of future undiscounted contractual payments (including interest payable) not defined in the consolidated statement of financial position.

Repayment periods under contractual undiscounted cash flows from financial liabilities in line with agreements as of 31 December 2020 were as follows:

	On demand and up to 1 month	1–3 months	3–12 months	1–5 years	Over 5 years	Maturity date not determined	Total
							(UAH million)
Financial liabilities							
Banknotes and coins in circulation	558,479	-	-	-	-	215	558,694
Accounts of banks	50,017	-	-	-	-	-	50,017
Accounts of government and other							
institutions	70,664	-	-	-	-	-	70,664
Certificates of deposit issued by the NBU	163,512	-	-	-	-	-	163,512
Borrowings received	-	22	66	2,849	-	-	2,937
Liabilities to the IMF, apart from IMF quota							
contributions	3	13,202	17,696	156,260	12,602	3,317	203,080
Liabilities to the IMF in respect of quota							
contributions	81,917	-	-	-	-	-	81,917
Other financial liabilities	9	9	44	-	-	498	560
Loan commitments	2,000	-	-	-	-	-	2,000
Liabilities on swaps, including:	78	16	-	206	-	-	300
swaps settled on a net basis	-	-	-	206	-	-	206
swaps settled on a gross basis	78	16	-	-	-	-	94
amounts due from	22,620	2,280	-	-	-	-	24,900
amounts due to	22,744	2,262	-	-	-	-	25,006
Total future payments on financial							
liabilities	926,679	13,249	17,806	159,315	12,602	4,030	1,133,681

Repayment periods under contractual undiscounted cash flows from financial liabilities in line with agreements as of 31 December 2019 were as follows:

	On demand and up to 1 month	1–3 months	3–12 months	1–5 years	Over 5 years	Maturity date not determined	Total
							(UAH million)
Financial liabilities							
Banknotes and coins in circulation	425,041	-	-	-	-	215	425,256
Accounts of banks	78,444	-	-	-	-	-	78,444
Accounts of government and other							
institutions	38,982	-	_	-	-	-	38,982
Certificates of deposit issued by the NBU	152,278	-	-	-	-	-	152,278
Borrowings received	_	29	87	2,513	-	-	2,629
Liabilities to the IMF, apart from IMF quota							
contributions	2	9,041	11,411	133,268	31,272	2,668	187,662
Liabilities to the IMF in respect of quota							
contributions	65,886	-	-	-	-	-	65,886
Other financial liabilities	53	3	87	-	-	529	672
Loan commitments	2,000	-	-	-	-	-	2,000
Total future payments on financial							
liabilities	762,686	9,073	11,585	135,781	31,272	3,412	953,809

## Section IV. Capital Management

### 28. Capital Management

The capital function of the NBU is to ensure economic independence and its ability to perform the functions defined by the legislation of Ukraine. As of 31 December 2020, the total amount of capital managed by the NBU was UAH 184,926 million (UAH 83,329 million as of 31 December 2019). No requirements are set for the NBU's equity, except for the amount of authorized capital established by the Law of Ukraine *On the National Bank of Ukraine*.

#### **Authorized Capital**

According to the Law of Ukraine *On the National Bank of Ukraine*, the authorized capital is UAH 10 million. It was increased to UAH 100 million by the decision of the NBU Council based on results of 2007.

#### **General reserves**

The NBU creates general reserves, which are used to cover its losses, in accordance with the Law of Ukraine *On the National Bank of Ukraine*.

General reserves made in the reporting year must equal 10% of the average annual monetary liabilities of the NBU that in 2020 amounted to UAH 676,914 million (in 2019, in accordance with the amendments to the Law of Ukraine *On the National Bank of Ukraine* introduced in March 2020, the 2019 general reserves should be 10% of the NBU's average annual monetary liabilities amounting to UAH 513,972 million).

#### **Revaluation Reserves for Assets and Liabilities**

According to the Law of Ukraine *On the National Bank of Ukraine*, unrealized gains from revaluation of foreign currency and monetary gold due to changes in the official exchange rate of the hryvnia to foreign currencies/accounting price of gold throughout the reporting year, unrealized gains from revaluation of securities and derivative financial instruments in connection with their revaluation to fair value, and unrealized gains or losses from revaluation of bank metals due to changes in the accounting price of bank metals are attributed by the NBU to the item Revaluation Reserves for Assets and Liabilities in the Equity section of the consolidated statement of changes in equity.

The amount of revaluation reserves is used to offset the amount of unrealized losses from revaluation of foreign currency, monetary gold, securities, and derivative financial instruments carried at fair value if they accumulate throughout the reporting year.

The amount of revaluation reserves for foreign currency, monetary gold, securities, derivative financial instruments, and bank metals that are disposed of is included into the distributable profit in the corresponding reporting periods.

As of 31 December 2020 and 2019, the equity of the NBU consisted of the following components:

	2020	2019
		(UAH million)
Statutory capital	100	100
General reserves	51,397	50,816
Retained earnings	16,337	623
Revaluation reserves of foreign currency and monetary gold	105,318	25,486
Revaluation reserves of investment metals	1,320	596
Revaluation reserves of financial instruments to their fair value	10,454	5,708
Total equity	184,926	83,329

### 29. Liabilities on profit distribution to the State Budget of Ukraine

#### **Accounting Policy**

Pursuant to the Tax Code of Ukraine, the NBU makes settlements with the State Budget in line with Article 5 of the Law of Ukraine *On the National Bank of Ukraine*.

The NBU transfers its portion of distributable profit to the State Budget of Ukraine in accordance with the Law of Ukraine *On the National Bank of Ukraine*. Distributable profit is determined by reducing the profit by the amount of unrealized gains for the reporting period which are directed to revaluation reserves and by increasing it by the amount of unrealized losses and the realized revaluation result covered by the revaluation reserve. These transfers are classified as settlements with the owner and are reflected in the consolidated statement of changes in equity. A part of the distributable profit that is left after general reserves are made and that is payable to the State Budget of Ukraine is transferred after an external auditor confirms and the NBU Council approves the annual financial statements. In accordance with the Law of Ukraine *On the National Bank of Ukraine*, the NBU may not transfer to the State Budget of Ukraine a portion of distributable profit that is higher than that determined in the annual financial statements, as confirmed by the external auditor and approved by the NBU Council. As of 31 December 2020, the NBU's liabilities to the state budget for transferring a portion of distributable profit for 2020 amounted to UAH 24,434 million (as of 31 December 2019 – UAH 42,722 million). Liabilities as of 31 December 2019 transferred to the state budget in April 2020 according to the schedule agreed with the Ministry of Finance of Ukraine.

Reconciliation of the operating profit with the profit of the NBU for 2020:

	NBU's incomes and expenses	Consolidation adjustments	Income and expenses according to the Consolidated Statement of Profit or Loss and Other Comprehensive Income
			(UAH million)
Net interest income	15,298	26	15,324
Interest income on financial assets at fair value through profit or loss	8,708	-	8,708
Net fee and commission income	224	-	224
Net increase in reserves for assets and liabilities	114	3	117
Other income and expenses	(3 845)	(28)	(3,873)
Operating profit	20 499	1	20,500
Results from transactions with financial assets and liabilities in foreign currency and monetary gold	95,144	-	95,144
Result on transactions with financial instruments at fair value through profit or loss (net of interest income)	9,305	-	9,305
Results on financial instruments	104,449	-	104,449
Adjustment to reflect the annual profit attributable to noncontrolling interest	-	-	-
Profit for the year	124,948	1	124,949

Net increase in reserves for assets and liabilities includes the following items of the Consolidated Statement of Profit or Loss and Other Comprehensive Income: Gains on Reversal of Impairment of Main Interest-Bearing Financial Assets, Expenses on Probable Contingencies and Other Accrued Liabilities, and Impairment Losses on Other Assets. Other income and expenses include items Staff Costs, Costs Related to Production of Banknotes, Coins, Souvenirs and Other Products, Administrative and Other Expenses, Expenses on Income Tax of the Subsidiary, and Other Income. Reconciliation of the operating profit with the profit of the NBU for 2019:

	NBU's income and expenses	Consolidation adjustments	Income and expenses according to the Consolidated Statement of Comprehensive Income
			(UAH million)
Net interest income	20,307	42	20,349
Interest income on financial assets at fair value through profit or loss	7,275	-	7,275
Net fee and commission income/expenses	251	1	252
Net decrease/(increase) in reserves for assets and liabilities	1,367	1	1,368
Other income/(expenses)	(3,234)	(32)	(3,266)
Operating profit	25,966	12	25,978
Results from transactions with financial assets and liabilities in foreign currency and monetary gold	(43,441)	-	(43,441)
Result on transactions with financial instruments at fair value through profit or loss (net of interest income)	6,156	-	6,156
Results on financial instruments	(37,285)	-	(37,285)
Adjustment to reflect the annual profit attributable to noncontrolling interest	_	(2)	(2)
Loss for the year	(11,319)	10	(11,309)

Liabilities for transferring distributable profit to the State Budget, which are determined in accordance with the Law of Ukraine *On the National Bank of Ukraine*, are calculated as follows:

	Note	2020	2019
		· · ·	(UAH million)
Operating profit of the NBU		20,499	25,966
Realized result on transactions with financial assets and liabilities in foreign currency and monetary gold	18	15,312	9,633
Realized result on transactions with financial instruments at fair value through profit or loss	19	2,335	1,749
Unrealized losses not compensated by revaluation reserves of financial instruments to their fair value	19	(565)	(270)
Unrealized result on revaluation of previous years that was realized in the current year on disposed securities and derivatives (financial instruments)		2,789	1,057
Realized result on disposed investment metals		364	173
Write-back of other reserves and profit on free transfer of assets		(6)	4,995
Distributable profit for the year		40,728	43,303
General reserves created		(16,294)	(581)
Portion of distributable profit subject to transfer to the State Budget		24,434	42,722

# Section V.I. Nonfinancial assets and liabilities

### 30. Property and Equipment and Intangible Assets

#### Accounting Policy

Property and equipment (PE) items are carried at initial cost, less accumulated depreciation and impairment loss.

Initial cost of acquired PE items includes the costs on acquisition and set-up.

Costs on enhancement of any PE item which increases the expected economic benefits are included in the cost of such PE items. Costs on minor repairs and maintenance and obtaining initially estimated future economic benefits from using PE are expensed when incurred. Costs of replacing major parts or components of PE items are capitalized and the residual value of the replaced part is charged to expenses in the consolidated income statement of the reporting period.

In case of impairment of PE the cost is reduced to the expected recoverable amount of whichever assessment is higher: fair value less costs to sales or value in use. The decrease of carrying amount is reported as profit or loss in the consolidated statement of profit or loss and other comprehensive income. Impairment cost of assets recognized in previous periods is reversed if estimates were changed used to determine the expected recoverable amount.

Result of disposal of fixed assets determined as the difference between the proceeds and the asset's carrying amount are recognized in profit or loss of the consolidated statement of profit or loss and other comprehensive income.

Capital investments in progress are carried at initial cost. Upon completion of construction, assets are included in the buildings and constructions entry and are measured at initial cost. Capital investments in progress are not depreciated until the asset is ready for use.

#### **Depreciation of PE and Investment Property**

Depreciation of property and equipment commences in the month following the commissioning of assets and ceases upon disposal of assets or at completely depreciated PE (in case of the latter, useful life is reviewed and adjusted as necessary). Depreciation is calculated using the straight-line method for an even decrease in initial cost to residual value over the estimated useful lives as follows:

buildings and facilities	20–50 years
vehicles	7–28 years
machinery and equipment	4-20 years
tools, fixtures, and fittings	4–10 years
other fixed assets	2–25 years.

Land and capital investments in progress are not depreciated.

The residual value of an asset is the estimated amount that the NBU would currently obtain from disposal of the asset, less the estimated costs of disposal, if the asset is out-of-date and in the condition expected at the end of its useful life. The residual value of an asset is equal to nil if the NBU expects to use the asset until the end of its useful life.

#### Intangible assets

All of the NBU's intangible assets have definite useful lives and primarily include computer software and licenses for its use.

The initial cost of acquired intangible assets includes the costs incurred to acquire and bring them to use. Acquired intangible assets are amortized on a straight-line basis over the expected useful lives from 2 to 8 years and subsequently measured at initial cost less accumulated amortization and impairment loss.

#### Accounting valuations and judgements include:

# Impairment of property and equipment and intangible assets

As of each reporting day, the NBU's management reviews tangible and intangible assets for impairment taking into account the analysis of certain events or circumstances that evidence on impairment. As of 31 December 2020 and 2019, the NBU reported no signs of impairment in property and equipment and intangible assets based on the results of such analysis.

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	Buildings and structures	Vehicles	Machinery and equipment	Tools, fixtures, and fittings	Other fixed assets	Construction in progress	Intangibl e assets	Total
							(UA	H million)
Initial cost as of 1 January 2019	4,774	153	4,656	104	236	127	448	10,498
Depreciation and amortization as of 1 January 2019	(2,211)	(131)	(2,721)	(95)	(201)	(9)	(350)	(5,718)
Carrying amount as of 1 January 2019	2,563	22	1,935	9	35	118	98	4,780
Additions		1	143	1	6	98	36	285
Transfers to other categories, including:	13	-	(4)	-	(4)	(2)	(3)	-
Initial cost	13	-	(4)	_	(4)	(2)	(3)	_
Other additions, including:	-	-	-	-	-	-	-	-
Initial cost	_	-	-	-	3	_	-	3
Depreciation and amortization	_	-	-	-	(3)	-	_	(3)
Disposals, including:	(242)	-	(4)		(3)	(1)	-	(250)
Initial cost	(385)	(2)	(69)	(6)	(14)	(1)	(3)	(480)
Depreciation and amortization	143	2	65	6	11	-	3	230
Transfers to investment property, including:	(3)	_	_	_	_	_	-	(3)
Initial cost	(3)	-	-	-	-	-	-	(3)
Depreciation and amortization charges in the current reporting period	(98)	(9)	(268)	(2)	(8)		(41)	(426)
Initial cost as of 31 December 2019	(98)	(9)	(200)	(2)	(8)	222	(41)	(426) 10,303
Depreciation and amortization as of 31 December 2019	(2,166)	(138)	(2,924)	(91)	(201)	(9)	(388)	(5,917)
Carrying amount		. ,					· · · · ·	
as of 31 December 2019	2,233	14	1,802	8	26	213	90	4,386
Additions	-	11	174	-	21	36	20	262
Transfers to other categories, including:	39	-	87	_	(5)	(119)	(4)	(2)
Initial cost	39	-	87	-	(5)	(119)	(4)	(2)
Disposals, including:	(7)	-	_	_	_	(77)	_	(84)
Initial cost	(19)	-	(16)	(1)	(4)	(77)	(2)	(119)
Depreciation and amortization	12	-	16	1	4	-	2	35
Transfers to investment property, including:	-	-	-	-	-	-	-	-
Initial cost	-	-	-	-	-	-	-	-
Depreciation and amortization charges in the current reporting period	(94)	(6)	(234)	(2)	(6)		(30)	(372)
Initial cost as of 31 December 2020	4,419	163	4,971	98	(0)	62	(30)	10,444
Depreciation and amortization as of 31 December 2020	(2,248)	(144)	(3,142)	(92)	(203)	(9)	(416)	(6,254)
Carrying amount as of 31 December 2020	2,171	19	1,829	6	36	53	76	4,190

As of 31 December 2020, initial cost of fully depreciated property and equipment that were still in operation amounted to UAH 2,041 million (as of 31 December 2019: UAH 1,766 million).

Fixed assets and intangible assets are noncurrent assets.

As of 31 December 2020 and 2019, based on the results of impairment test, no signs of impairment were noticed.

Disposal of fixed assets and intangible assets of subsidiaries has been adjusted by the amount of depreciation and amortization charges calculated in accordance with the NBU's accounting policies. In 2020, pursuant to the regulatory acts of the Cabinet of Ministers of Ukraine, free-of-charge transfer of items of state property rights from the NBU's area of responsibility to the area of responsibility of other bodies authorized to manage state property took place. The result of the transfer of those assets amounted to UAH 6 million (as of 31 December 2019: UAH 248 million), which are recognized in equity as a transaction with the founder.

#### **Capital Commitments**

As of 31 December 2020, the NBU had capital commitments with respect to the acquisition, construction, and improvement of property and equipment and intangible assets totaling UAH 251 million (as of 31 December 2019: UAH 175 million).

### 31. Other nonfinancial assets

#### Accounting Policy

#### **Investment and Other Precious Metals**

Investment metals are the reserves of non-monetary gold, silver, platinum, and palladium kept in the State Treasury of Ukraine. investment metals are reported by weight in Troy ounces and their value in hryvnias according to accounting price of investment metals.

The accounting price of investment metals under which the investment metals are reported in consolidated financial statements, was as follows:

	31 December 2020 (in hryvnias)	31 December 2019 (in hryvnias)
1 Troy ounce of gold	53,200.92	35,802.17
1 Troy ounce of silver	744.19	423.27
1 Troy ounce of platinum	30,203.49	22,532.45
1 Troy ounce of palladium	66,289.52	44,989.33

Unrealized revaluations of investment metals due to change of accounting price of investment metals are included into other comprehensive income in the consolidated statement of profit or loss and other comprehensive income recognized in the period in which they occurred. Realized revaluations of investment metals are included into the retained earnings.

Investment metals deposited in foreign banks for which the interest income is accrued, are included into the *Funds and deposits in foreign currency and investment metals* (Note 6). Revaluations of investment metals deposited in foreign banks due to change of accounting price of investment metals are included into other comprehensive income in the consolidated statement of profit or loss and other comprehensive income recognized in the period in which they occurred.

Investment metals include gold ingots that do not meet the established standards, scrap gold and other metals, and are accounted at cost in Stocks of tangible assets.

Investment and precious metals are included into *Other* assets in the consolidated statement of financial position.

#### Noncurrent Assets Held for Sale

The NBU recognizes its noncurrent assets as held for sale when the carrying amount of asset is recovered rather through sale than current use.

To recognize noncurrent assets as held for sale, assets should be ready for their immediate sale, and such a sale should be highly probable.

The noncurrent assets recognized as held for sale are recognized at whichever is lower: carrying amount or fair values less cost to sell. If carrying amount of items as of the date of recognition as held for sale exceeds their fair value less cost to sell, then loss on valuation of such items is recognized.

#### **Investment Property**

Investment property items include:

- the land a future designation of which is undetermined
- a building not occupied by the NBU and designed for renting out under one or several leases
- a building owned by the NBU or managed under lease agreement and rented out under one or several lease agreements
- immovable property under construction or improvement for future use as investment property.

The NBU carries its investment property at cost. Investment property items are depreciated using the straight-line method.

The NBU recognizes its investment property using the following criteria:

- immovable property is transferred under leases
- immovable property is removed from the list of property used by the NBU according to the NBU's resolution on making decision to rent out the immovable property
- economic benefits are received, which are related to such investment property
- it is probable to estimate reliably the cost of immovable property.

In the event one item of investment property is held to receive rentals and the other part is held for use in operations, then such items of investment property are recognized separately if they can be disposed of separately.

Expenditures on current maintenance of investment property are recognized as expenses when they arise. Expenditures on improvement of investment property items that lead to increase in initially expected benefits from their use, increase the initial cost of those items.

Investment property that begins to be held for sale is classified as assets held for sale.

Investment property items are derecognized in the event changes occur in the mode of their functional use.

	2020	2019
		(UAH million)
Other nonfinancial assets		
Investment metals	2,794	1,743
Current tangible assets	1,214	1,092
Commemorative and investment coins, souvenirs and other products	492	541
Precious metals and stones	486	339
Advance payments	76	100
Investments in associated company	32	31
Investment property	46	47
Noncurrent tangible assets held for sale	4	46
Other	4	17
Impairment from other nonfinancial assets	(4)	(4)
Total other nonfinancial assets	5,144	3,952

All other assets are expected to be recovered within 12 months, except for noncurrent receivables, investment metals, investment property, and investments in associates.

### 32. Other Nonfinancial Liabilities

#### Accounting Policy

#### **Provisions for Probable Contingencies**

The NBU's provisions for probable contingences include provisioning under legal or constructive obligations (as a result of past events), particularly under legal suits the settlement of which was very likely (an adverse scenario being more probable than a positive one) to cause an outflow of resources that carry economic benefits and the amount (expenses) under which they can be reliably assessed. Loss allowances are recognized in financial results of the consolidated income statement and other comprehensive income in the period in which they arise.

#### Judgement

#### Provisions under Lawsuits Filed against the NBU

The NBU's management analyzes lawsuits, in which it figures as defendant, in order to identify a high probability of potential losses to occur, as a result of which the NBU shall make payments in favor of the other party, the plaintiff. The NBU determines the probability of potential losses as high mainly when the court of first instance rules unfavorably against the NBU.

	2020	2019
		(UAH million)
Other nonfinancial liabilities		
Provisions for probable contingencies	223	131
Accounts payable for taxes	11	4
Unearned revenue	1	-
Other	-	3
Total other nonfinancial liabilities	235	138

#### **Contingent Liabilities**

#### Legal Proceedings

From time to time and in the normal course of business, claims against the NBU occur. As of 31 December 2020 and 2019, there were no lawsuits against the NBU for which the likelihood of resulting in losses can be assessed as low. Accordingly, the NBU made no provisions for liabilities that could arise from these lawsuits.

At the same time, for lawsuits against the NBU that the NBU estimated as having high likelihood of resulting in losses, the NBU made respective provisions. The NBU is also a defendant in claims for restoration of the activities of some banks. At present, the mechanism for the restoration of banks in Ukraine is not regulated by the law.

# Section V.II. Other Income and Expenses (except for *Financial Results by Financial Instruments*)

#### **Accounting Policy**

#### Recognition of Income and Expenses

Other income and expenses are recognized on accrual basis depending on stage of certain transaction completion that is assessed as ratio of provided (received) services to total services as established under agreement.

For income recognition a five-step analysis model is used:

- agreement identification
- identification of certain liabilities within the concluded agreement
- determination of transaction price
- distribution of transaction price between liabilities
- recognition of income when or as the liability is fulfilled.

The expenses are recognized as expenses of a certain period simultaneously with recognition of the income for which they were incurred. The expenses which cannot be related to income of a certain period, are recognized as expenses of the reporting period during which they were incurred.

# Costs related to the production of banknotes, coins, souvenirs, and other products

The NBU carries out the production of banknotes and coins of the Ukrainian domestic currency. Costs for production of banknotes and coins (except for commemorative coins produced from precious metals and investment coins) are recorded in the NBU's expenses accounts as the finished products are transferred by the Banknote Printing and Minting Works to the NBU's Central Vault. Costs for production of banknotes and coins include depreciation of production machinery, labor costs, other production costs.

Value of commemorative coins produced from precious metals and investment coins lees their face value, is recognized as asset in the NBU's consolidated statement of financial position in Other assets and is written off as expenses as the coins are sold.

#### **Personnel Costs**

Labor costs, payment of a single contribution for mandatory state social insurance, contributions to the NBU Corporate Nonstate Pension Fund, and costs on personnel training and skill enhancement, are recognized in the period in which they were incurred by the NBU.

Costs for annual (principal, additional, and social) leaves not used by the NBU employees for the past work years and transferred to next years, and other future employee benefits are recognized as liabilities on employee benefits.

The NBU is the founder of the Corporate Nonstate Pension Fund which is the fund with fixed contributions. The NBU pays contributions to this fund on a contractual basis. After funds transfer the NBU has no liabilities regarding these payments. The contributions to the NBU Corporate Nonstate Pension Fund are recognized in Personnel costs when the liabilities on funds transfer arise. After the NBU employee's retirement all payments are performed by the NBU Corporate Nonstate Pension Fund.

Taxes except for payment of distributable profit paid by the NBU, are included into Administrative and other expenses.

### 33. Other Income

	2020	2019
		(UAH million)
Income from sale of investment and commemorative coins, souvenir and other products	614	681
Fines, penalties, forfeit received/returned	23	134
Income from sale of property and equipment, and intangible assets	9	74
Income from license registration and issue	2	3
NBU percentage ownership in income of associated companies	2	76
Other	69	60
Total other income	719	1,028

### 34. Personnel Costs

	2020	2019
		(UAH million)
Payroll of staff	1,653	1,422
Single contribution for mandatory state social security and contributions to nonstate pension		
funds	374	320
Financial assistance and other social benefits	4	14
Other	18	13
Total personnel costs	2,049	1,769

Other personnel costs include costs for training and development, expenditures for voluntary medical insurance of employees, etc.

### 35. Administrative and Other Expenses

	2020	2019
		(UAH million)
Depreciation and amortization	203	207
Utilities and household expenses	151	160
Compensation to the Deposit Guarantee Fund for maintaining and selling collateral	248	152
Expenses for maintenance of noncurrent tangible and intangible assets	140	152
Consulting and legal services	20	111
Taxes, duties, and charges	24	29
Business trips	10	27
Telecommunication services and maintenance	26	24
Loss from disposal of property and equipment and intangible assets	77	2
Value of sales of the services of the waste treatment facilities	14	14
Costs of operations with collateral	16	2
Compensations to the NBU Council members	15	13
Repayments to banks of the earlier paid fines	16	3
Banknote Printing and Minting Works' expenses not included into cost of production	355	418
Other	60	58
Total administrative and other expenses	1,375	1,372

Depreciation and amortization charges for 2020 exclude depreciation worth UAH 170 million (in 2019: UAH 219 million) for property and equipment used in the production of banknote paper, banknotes, coins, and other products. This portion of depreciation and amortization charges is included in costs related to the production of banknotes, coins, and other products. Other costs include contributions to the NBU trade union, fines, penalties, and forfeit, value of services on audit, costs for software maintenance, financial assistance and other social benefits to the NBU pensioners, etc.

# Section VI. Other Notes

### 36. Related Party Transactions

#### Related party transactions. Judgement

The NBU carries out transactions with related parties, mainly with the government, banks and organizations controlled by the state. In accordance with IFRS 9, financial instruments are initially recognized at fair value. If no active market exists for specific market interest rates, the NBU applies judgement. A basis for the judgement is pricing for similar types of transactions with nonrelated parties and analysis of the effective interest rate, as specified in Note 21.

#### Terms and Conditions of Related Party Transactions

For the purposes of these consolidated financial statements, parties are considered to be related if the parties are under common control, or if one party has the ability to control the other party or can exercise significant influence over the other party in making financial or operational decisions, as defined by IAS 24 *Related Party Disclosures*. In considering each possible related party relationship, attention is paid to the substance of the relationship, not merely the legal form. The related parties of the NBU include the Ukrainian government, state-controlled entities, key management personnel, etc.

In the normal course of its operations, the NBU enters into transactions with related parties. The year-end balances on these transactions are presented in the table below:

	2020			2019			
	Notes	Governme nt and state- controlled entities	Associates	Other related parties	Governmen t and state- controlled entities	Associates	Other related parties
							(UAH million)
Domestic securities	9	335,401	-	-	347,191	-	_
Loans to banks and other borrowers		25,752	-	-	11,989	-	_
Loss allowances for loans to banks and other borrowers		(4,098)	-	-	(4,346)	-	_
Domestic public debt		1,635	-	-	1,727	-	-
Other assets		949	32	-	49	30	_
Accounts of banks		18,451	-	-	51,564	-	_
Accounts of government and other institutions	13	69,144	_	6	36,277	108	3
Accounts of the Deposit Guarantee Fund	13	1,414	-	-	2,498	-	_
Liabilities to transfer distributable profit to the state budget	29	24,434	-	-	42,722	-	_
Certificates of deposit issued by the NBU		46,512	-	-	56,185	-	-
Other liabilities		23	-	-	5	-	-

Other related party transactions include the account balance of the NBU Corporate Nonstate Pension Fund.

The terms and conditions of the transactions above were as follows:

long-term loans to state-owned banks (included in the loans to banks and other borrowers in the table above) as of 31 December 2020 bore interest rates from 6.00% to 16.00% (as of 31 December 2019: from 14.25% to 16.00%)

the accounts of the government and other institutions as of 31 December 2020 and 2019 December 2019 were non-interest-bearing

the accounts of the Deposit Guarantee Fund bore interest rates of 5.68% as of 31 December 2020 (31 December 2019: 9.53%)

the balances of required reserves transferred by state-owned banks to the NBU's correspondent accounts (included in accounts of banks in the table above) earned no interest as of 31 December 2020 and 2019 (Note 12).

The terms of transactions with domestic public debt and domestic securities are disclosed in the respective notes.

#### Income and expense items from transactions with related parties were as follows:

	2020			2019		
	Government and state- controlled entities	Associated companies	Other related parties	Government and state- controlled entities	Associated companies	Other related parties
					(UA	AH million)
Interest income	29,258	-	-	34,461	_	-
Interest expenses	(4,042)	-	-	(1,998)	-	-
Fee and commission income	120	-	-	100	_	-
Other income	166	2	-	411	76	-
Staff costs	-	-	(38)	_	_	(37)
Other expenses	(583)	-	(40)	(290)	-	(35)
Profits from impairment recovery	248	-	-	67	-	-

In accordance with the Law of Ukraine *On the National Bank of Ukraine*, the NBU provides services to the State Treasury of Ukraine on a free-of-charge basis.

In 2020, the short-term benefits (salary) of key management personnel were UAH 38.0 million, including remuneration to

members of the NBU Council of UAH 14.7 million [in 2019, the short-term benefits (salary) of key management personnel were UAH 36.5 million, including remuneration to members of the NBU Council of UAH 12.4 million]. As of 31 December 2020 and 31 December 2019, there were no outstanding loans to key management personnel.

Short-term benefits (salary) to NBU Council Chairperson Members:

NBU Council Chairperson and Members	2020, in UAH millions	Length of service in 2020 in months	2019, in UAH millions	Length of service in 2019 in months
Bohdan Danylyshyn	1.9	12	1.6	12
Vasyl Furman	1.9	12	1.6	12
Tymofiy Mylovanov	-	-	1.0	8
Vasyl Horbal	0.5	3.5	-	-
Viktor Koziuk	1.9	12	1.6	12
Vira Rychakivska	0.9	6	1.6	12
Olena Scherbakova	1.9	12	1.6	12
Mykola Kalenskyi	1.9	12	1.6	12
Oleksandr Petryk	1.9	12	1.6	12
Vitaliy Shapran	1.9	12	0.2	1.5
Total	14.7		12.4	

Short-term benefits (salary) to NBU Governor and Board Members:

Governor and Board Members	2020, in UAH millions	Length of service in 2020 in months	2019, in UAH millions	Length of service in 2019 in months
Kyrylo Shevchenko	2.5	5.5		
Yakiy Smolii	2.2	6	4.6	12
Kateryna Rozhkova	3.8	12	4.1	12
Roman Borysenko	2.1	8	3.8	12
Yuriy Heletiy	2.0	5	-	-
Yaroslav Matuzka	1.3	3.5	_	_
Dmytro Sologub	3.6	12	3.9	12
Serhii Kholod	1.6	7	3.9	12
Oleksii Shaban	2.4	11	-	-
Oleg Churiy	1.8	7	3.8	12
Total	23.3		24.1	

### 37. Events Subsequent to the Reporting Date

After the reporting date, in February and March 2021 liabilities worth SDR 294 million (UAH 11,713 million at the official rate as of the transaction date, or UAH 10,839 million at the annual exchange rate of the IMF) were repaid to the IMF in line with the timeframe of the EFF program.

In March 2021, the State Treasury Service of Ukraine, following the instruction of the Ministry of Finance of Ukraine upon the order of the Cabinet of Ministers of Ukraine transferred to the NBU UAH 946 million as requested by the

NBU for fulfilling the obligations under the state guaranty of B3 SMI bonds (Notes 9, 11).

On 5 March 2021, the NBU Board has decided to increase its key policy rate to 6.5% per annum from 6.0%. The decision is aimed at gradually reducing inflation to its target, as the Ukrainian and global economies are recovering.

# 38. Introducing New and Amended Standards and Interpretations of the Financial Statements

#### Amended IFRSs and interpretations that came into effect on 1 January 2020 and were adopted to be applied.

Amendments to IAS 1 *Presentation of Financial Statements* and IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* are intended to simplify the definition of "material" in IAS 1, however do not amend the main concept of "material" in the Standards. Definition of "material" in IAS 8 was replaced with a reference to IAS 1

Amendments to references to the IFRS Conceptual Framework for Financial Reporting

Conceptual Framework for Financial Reporting (apply retrospectively to annual reporting periods beginning on or after 1 January 2020)

Amendments to IFRS 3: Business combinations

Interest Rate Benchmark Reform, Amendments to IFRS 9, IAS 39 and IFRS 7 (phase I)

Amendments to IFRS 16 Leases: Covid-19-related rent concessions (apply retrospectively to annual reporting periods beginning on or after 1 June 2020)

Amended IFRSs and interpretations had no significant effect on the NBU's financial results and financial position.

# New and Revised Standards that have been Issued but are not yet Effective

Amendments to IFRS 10 *Consolidated Financial Statements* and IAS 28 *Investments in Associates and Joint Ventures* – Sale or distribution of assets between an investor and its associate or joint venture (apply to annual reporting periods beginning on or after the date to be specified. Early application is permitted) Amendments to IAS 1 *Presentation of Financial Statement* – The classification of liabilities as current or noncurrent is intended to provide a more general approach to the classification of liabilities under IAS 1 based on the contractual terms in effect at the reporting date (apply to annual reporting periods beginning on or after 1 January 2023)

Amendments to IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* – Onerous Contracts – Cost of Fulfilling a Contract (apply to annual reporting periods beginning on or after 1 January 2022)

Amendments to IFRS 3 *Business combinations* related to amendments to Conceptual Framework for Financial Reporting (apply to annual reporting periods beginning on or after 1 January 2022)

Amendments to IFRS 9, IAS 39, and IFRS 7 Interest Rate Benchmark Reform, IFRS 4, and IFRS (phase II: the amendments will go into effect for the years starting 1 January 2021)

IFRS 17 *Insurance Contracts* is a new financial reporting standard for insurance contracts that determines recognition, measurement, presentation, and disclosure of information (applies to annual reporting periods beginning on or after 1 January 2023. Early application is permitted)

Annual improvements to IFRS in 2017–2020 (amendments to IFRS 1, IFRS 9, IFRS 16, IAS 41).

The NBU did not apply the above new and revised standards before the effective date. NBU top-management anticipates that the application of the Standards mentioned above is not going to have a significant effect on the NBU's financial results and financial position.

07 April 2021 Kyiv, Ukraine