National Bank of Ukraine

Consolidated Financial Statements and Consolidated Management Report

for the Year Ended
31 December 2018

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National Bank of Ukraine

Consolidated Management Report

for the Year Ended 31 December 2018

Part 1. Nature of Operations

1.1. General Information about the National Bank of Ukraine (main types of activities, subsidiaries, and the purpose of its operations)

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 2018 and 2017, 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 PJSC (the Settlement Center).

The Settlement Center is the only institution that has a mandate to provide cash settlements 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 participants. 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 2018 and 2017, the NBU had investments in the following associated companies: the German Ukrainian Fund and 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 2018 (Consolidated Financial Statements).

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 and to make provisions that are used to finance investment made in order to support the central bank's operations. 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 supervise the central bank's internal controls, 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 position.

Sitting Council members that have been appointed by parliament:

Viktor Koziuk
Olena Scherbakova
Tymofiy Mylovanov (was elected Deputy Head of the Council on 25 October 2016)
Vira Rychakivska

Sitting Council members that have been appointed by the Ukrainian president:

Bohdan Danylyshyn (was elected Head of the Council on 25 October 2016)
Vasyl Furman
Mykola Kalenskyi
Oleksandr Petryk

Yakiv Smolii, Governor of the National Bank of Ukraine, is a Council member by virtue of his position.

Advisory Bodies of NBU Council

The **Audit Committee** is an advisory body of the NBU Council, which takes managerial decisions on the basis of the collegiality principle. The main purpose of the committee is to assess the reliability and effectiveness of the NBU's internal controls and the completeness and credibility of its annual financial statements; to monitor the central bank's expenses and the performance of its administrative expenses budget; to supervise the operation of the internal audit function; to monitor capital management; and to address other financial issues that are in the Council's mandate.

The **Expert Advisory Board** of the NBU Council is another advisory body. The main task of the board is to provide expert advice to NBU Council members, in particular in relation to assessing the impact from monetary policy parameters on Ukraine's social and economic development, identifying risks and threats to the country's economic growth, and providing recommendations for removing them.

The **Public Panel** of the NBU Council is a standing collegial and advisory body. Its task is to engage in dialogue with the general public in relation to safeguarding the stability of the banking system and the soundness of the hryvnia, protecting the rights and interests of financial services consumers, and making proposals to the NBU Council as how it should perform its duties. The members of the Public Panel are civil society institutions i.e. civil unions that have been legalized according to Ukrainian laws, have been operating for no less than two years, and whose main objective is to provide protection to financial service consumers.

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 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.

The composition of the NBU Board:

Yakiv Smolii was appointed Governor on 15 March 2018. Prior to that appointment Smolii was Acting Governor from 11 May 2017.

Kateryna Rozhkova was appointed First Deputy Governor on 15 June 2018; prior to that appointment she held the position of Deputy Governor. Rozhkova is responsible for prudential supervision.

Roman Borysenko oversees finance, human resources, and the management of property and procurement for the NBU.

Dmytro Sologub oversees monetary policy, macroprudential policy to ensure financial stability, economic analysis, the collection and analysis of statistics and reporting, and research.

Sergii Kholod was appointed Deputy Governor on 23 July 2018 after winning the open contest to fill the vacancy. Areas under his management include operational activity, payments, and cash circulation control.

Oleg Churiy oversees open market operations, FX regulation, and the NBU Depository.

More detailed information about the NBU Board is available on the NBU official website at https://bank.gov.ua/control/uk/publish/article?art_id=9091088&cat_id=36009

1.3. Organizational Chart. Organizational Changes in 2018

More detailed information about the NBU's organization chart is available on the NBU official website at https://bank.gov.ua/doccatalog/document?id=43399.

In 2018, the NBU continued to be involved in efforts to optimize its structure, with a view to meeting its strategic goals. To that end, the central bank carried out several changes to its structure.

- The Information and Public Communications Office was transformed into a Communications Department. This was done in order to enhance the role of the NBU's communications policy, take measures to raise people's financial awareness, and to reorganize the central bank's Money Museum.
- A new unit, the NBU Board Office was created. It is tasked with developing and maintaining the NBU's image at an appropriate level, coordinating the NBU's interactions with government authorities, civil society institutions, and the private sector, and supporting the operations of the NBU Board.
- A Procurement and Sales Department was established. It is responsible for conducting procurement purchases as prescribed by law and selling the NBU's own property and the pledged property the NBU has obtained.
- A Problem Assets Resolution Office was created in order to improve the central bank's handling of nonperforming exposures.

1.4. Structure and Composition of Corporate Governance Bodies (NBU Committees, Accountability, Interconnections)

At present, the NBU Board has eleven 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:

Policy Development

Monetary Policy Committee
Financial Stability Committee

Policy Implementation

Credit Committee
Assets and Liabilities Management Committee
Committee on Banking Supervision and Regulation and Oversight of Payment Systems
Committee on Cash Circulation and Payments

Policy Support

Change Management Committee
Operational Risk Management and Business Continuity Committee
Budget Committee
Tender Committee
Committee for Strategic Planning of the NBU Banknote Printing and Minting Works Activities

The Mandate of NBU 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 task of the committee is to study and discuss monetary policy issues.

Financial Stability Committee. A consultative and advisory body that develops proposals and recommendations for the formulation of principles and the means of implementation of macroprudential policy to ensure financial stability.

Credit Committee. The committee is a consultative and advisory body tasked with elaborating and submitting to the NBU Board recommendations on lending to banks to support their liquidity, on provisioning and use of provisions to cover financial risks, on work on the repayment of nonperforming loans granted to insolvent banks by the NBU, and on the methodology of credit risk assessment for NBU transactions.

Assets and Liabilities Management Committee. A collective body of the NBU 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.

Committee on Banking Regulation and Supervision and Oversight of Payment Systems. A collective body of the NBU delegated by the NBU Board to take decisions on ensuring the stability and reliability of the Ukrainian banking system, on the protection of rights of depositors and other bank creditors, on solving the priority problems of banking supervision, on following the trends in the banking system, on the application of corrective measures against banks and nonbank financial institutions for violating laws, and on the approval of candidates for managerial positions in banks, licensing and registration issues, etc.

Change Management Committee. An advisory body of the NBU designed to centrally manage project activities at the NBU, with the goal of carrying out changes aimed at building a modern, institutionally capable financial sector (including the Ukrainian banking sector) and a central bank based on the European model. The committee aims to manage project activity at the NBU centrally. It also studies materials and proposals for the initiation and implementation of changes at the NBU, and the strategic programs and development plans of the NBU and the financial sector.

Committee on Cash Circulation and Payments. The committee is a collective advisory body of the NBU Board with the mandate to consider and take decisions on ensuring the operation of the cash circulation system, on defining strategic areas, on the organization of cash circulation and cash settlements, including assessment of needs for banknotes and coins, on issuing of cash into circulation, on cash and issuance operations in the domestic currency, on the organization of production of banknotes, coins, commemorative and investment coins of Ukraine, souvenir products, as well as the strategic development of cashless settlements, oversight of the payment infrastructure, payment systems operations, money remittances, issues related to the implementation of innovative payment instruments, etc.

Budget Committee. The committee is a collective advisory body of the NBU with functions related to organization, supporting and ensuring the NBU's cost management processes, as well as the acquisition and sale of the NBU's real estate. The Budget Committee was set up to ensure a professional approach by heads of NBU subdivisions to issues related to the NBU's supporting activities, with the ultimate goal of improving the quality of managers' decisions.

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.

Tender Committee. The committee is a collective body responsible for procurements (organizing and conducting). The committee carries out the planning of procurements, the selection of procurement procedures and their application, and ensures equal conditions for all participants, a fair and unbiased selection of winners, transparency of information and reports on public procurements, and so on.

Committee for Strategic Planning of the NBU Banknote Printing and Minting Works Activities. The committee is a standing collective advisory body to the NBU Board specially established for strategic planning of the activity of the NBU Banknote Printing and Minting Works to ensure qualitative and effective changes in its operations.

The professionalism of the NBU's committees helps 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.

1.5. Process Governance

Process Management

The NBU applies a systemic approach to process management based on the international standards of quality control (particularly ISO 9001:2015). Such an approach is aimed at improving the NBU's operations, and increasing the quality and effectiveness of processes. The NBU Board sets out a comprehensive vision of process management through implementing its concept for management system development. During 2018, the NBU process management concept was updated.

Process management is performed in cycles through the application of the Deming Shewhart cycle (PDCA) – plan, do, check, act.

As of 31 December 2018, the NBU defined 28 processes of the first level, 182 processes of the second level, and 896 processes of the third level.

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.

All changes in processes are directed at improving the results of the work of the processes. In 2018, 109 initiatives were implemented, and 85 more initiatives aimed at performance improvement are to be implemented in 2019. The main focus is on the automation of key functions and processes.

The NBU assesses the maturity level of process management every year to view the current situation and the results of the implementation of the process management system. In 2018, the maturity level was 3.37 points out of 5 (compared to 3.2 points in 2017), which by international standards is defined as a quantitatively managed maturity level.

Project Management

Project management at the NBU has been successfully implemented and is being further developed and improved. The NBU's Strategy and Reforming Department has a Project Office within its structure, which is the single center for analyzing all project initiatives at the NBU in terms of the expediency and justification of their implementation. At the end of 2018, the Project Office managed a portfolio consisting of 60 active projects.

Project activity at the NBU is automated. The Project Office web portal contains the current register of the NBU's projects and a complete database of project documentation for each project; the budgeting process ensures high quality and supervised implementation of budgeted projects. In 2018, the NBU improved its requirements for project management and expanded the scope of its automated instruments. The NBU's Project Office is currently working on the improvement of project management instruments, and their automation.

Priority Areas of Internal Transformation

Approved and presented to the public in spring 2018, the medium-term strategy of the NBU was its biggest achievement in 2018 on the way to becoming a modern institution. In addition to the strategy, the NBU presented an updated logo – the logical embodiment of its new philosophy and all of its changes and transformations.

Starting from 2012, the NBU ahead of schedule applied the 2010 version of IFRS 9 in the classification and measurement (excluding impairment) of financial assets and liabilities when compiling its consolidated financial statements.

As of 1 January 2018, the NBU completed a full conversion to the 2014 version of IFRS 9.

Additionally, in 2018, the NBU successfully completed projects in electronic workflow development, the implementation of the NBU virtualization system, and the modernization of the software and hardware complex for identifying and preventing attacks on the NBU's information network. At present, the NBU is modernizing its external security system, implementing a program for comprehensive process automation for SAP solutions, improving its internal control system, reforming its regulatory functions, implementing an electronic archive at the NBU, and developing a new NBU website.

1.6. Impact of Economic Environment on the Consolidated Financial Position and Performance of the National Bank of Ukraine

Ukraine saw its economic growth pick up speed in 2018, with real GDP up by 3.3% – the highest growth rate in seven years (in 2017, real GDP grew by 2.5%) (http://ukrstat.gov.ua).

The main contribution to real GDP growth came from an increase in household consumption, which accelerated significantly with the growth of household income, and from relatively high consumer confidence. The growth in household income was driven mainly by higher wages (real wages were up by 12.5% in 2018) (http://ukrstat.gov.ua). The effects of the updating of pensions and further growth in labor migrant remittances made a substantial contribution to the growth in household income throughout most of the year.

The increase in consumption supported rapid growth in the sectors that meet domestic demand, such as the retail trade, passenger turnover, and the services sectors. In addition, agriculture was one of the primary contributors to real GDP growth, thanks to a record-high harvest of grain and oilseeds. However, industrial production grew at a moderate pace due to transportation difficulties in the Sea of Azov in H2 2018, and the carrying out of repairs at several metallurgy plants. In addition, the growth in the global economy and trade slowed in H2 2018 amid ramped up protectionist measures and an overall deterioration in the price environment in the global commodity markets. This dragged down the growth in exports, eroded companies' financial performance and, coupled with uncertainty over whether the IMF would renew cooperation against the backdrop of the continuing election cycle, shifted investment activity into a lower gear. Although decelerating as well, import growth remained significant, propelled, among other things by the high global energy prices recorded throughout most of the year. The current account deficit widened to USD 4.5 billion in 2018 (compared to USD 2.4 billion in 2017), due to an increase in the deficit in external trade and dividend payments.

Financial account inflows rose to USD 7.4 billion, up from USD 5 billion in 2017. Although the private sector generated more capital inflows in 2018, the role of the government sector increased markedly towards the end of the year, as it placed Eurobonds and received official financing. This resulted in a surplus in the overall balance of payments, which pushed up international reserves to USD 20.8 billion by the end of the year.

In 2018, consumer price inflation declined to a five-year low of 9.8% (down from 13.7% in 2017) (http://ukrstat.gov.ua). Core inflation also slowed, to 8.7% yoy (http://ukrstat.gov.ua).

The central bank's tight monetary policy was instrumental in curbing inflation and reducing it to single digits. The NBU has raised the key policy rate six times since October 2017, by a total of 5.5 pp, to the current 18.0% per annum. The rate hikes were transmitted into higher market interest rates on hryvnia loans and deposits, providing incentives to save. Moreover, the tight monetary conditions also helped strengthen the hryvnia exchange rate (from UAH 28.07 per USD 1 as of 31 December 2017 to UAH 27.69 per USD 1 as of 1 December 2018. The growth in the supply of some foods (fruit, milk, meat, etc.) and a fall in global food prices were another two contributors to the decrease in inflation.

Despite the decrease, inflation had exceeded the NBU's target of 6% ± 2 pp by the end of 2018. The NBU specified this inflation target in its Monetary Policy Guidelines for 2018 and the Medium Term. The deviation from the target was largely due to factors over which monetary policy has only a limited effect. These factors included the growth in administered prices and the rise in global oil prices seen throughout most of the year. Uncertainty as to whether or not cooperation with the IMF will resume and high external risks also weighed on economic sentiment throughout most of the year. As a result, inflation expectations improved only slightly in 2018, and continued to exceed the NBU's forecast. Aggregate demand and further growth in production costs – including the cost of labor and energy – continued to push prices higher during the year.

In late 2018, risks to macrofinancial stability and risks of higher inflation abated, due to, among other things, the continued cooperation between Ukraine and the IMF under a new Stand-By Arrangement program. With expectations of a further pass-through of earlier key policy rate rises to market rates, in Q4 2018 the NBU twice decided to leave the key policy rate unchanged.

In 2018, the banking system had a large liquidity surplus, which started to narrow considerably in the latter half of the year. The volume of certificates of deposit (by principal) shrank by UAH 5.2 billion, to UAH 61.9 billion as of late 2018 (down from UAH 67 billion as of late 2017), with balances in banks' correspondent accounts dropping by UAH 1.9 billion, to UAH 35.7 billion as of late 2018 (down from UAH 37.5 as of late 2017). In addition, fluctuations in banking system liquidity throughout the year created one-off demand from individual banks for refinancing loans.

In 2018, the main channel of liquidity reduction was a significant increase in cash, which peaked, as is usual, in December, due to budgets catching up on a considerable backlog of expenditure financing at the end of the year. The main source of the banking system's liquidity came from purchases of foreign currency the NBU carried out to replenish international reserves when the supply of foreign currency exceeded demand. In 2018, the NBU was a net buyer of foreign currency, purchasing a total of USD 1.4 billion.

In 2018, rating agency Moody's raised Ukraine's sovereign rating by one notch, to Caa1, up from Caa2 as of late 2017, while Standard & Poor's and Fitch kept their ratings for Ukraine at B-.

Part 2. Objectives and Strategies

2.1. NBU Strategic Goals

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 the coming years. The NBU's Strategy is the only instrument that systemizes the ways to achieve the central bank's vision and mission, providing all of the NBU's customers with a clear and understandable view of its further policies.

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

The NBU's vision presents the NBU as a modern, open, and independent central bank, which enjoys public trust and is integrated into the European community of national central banks.

The NBU has prioritized several of the most urgent goals outlined in the NBU's Strategy, and will concentrate its efforts on meeting them:

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

2.2. Strategic Development Plans that Take into Account Existing Opportunities and Threats, and the NBU's Internal Resources and Values

By putting its Strategy for the middle term into the public domain, the NBU, as a modern, open, independent and effective central bank, has publicly committed itself to do all it can to deliver low inflation, ensure that the banking system is stable, transparent, and effective, revive lending, and to promote the effective regulation of the financial sector, free movement of capital, and financial inclusion.

In particular, in 2019 the NBU will continue to be involved in efforts to achieve these objectives in order to create a favorable environment for financial ecosystem participants – from banks to businesses, and from financial services consumers to those who have no access to such services. The NBU developed and made public the 2019 Action Plan, which contains a clear-cut list of the regulator's actions and key activities, as well as an analysis of internal and external risks that could prevent the NBU from implementing these measures. The 2019 Action Plan focuses on the following strategic areas:

Low and stable inflation rate
In meeting this strategic goal, in 2019 the central bank plans, among other things, to improve the operational design of monetary policy to respond to liquidity changes in a more flexible manner, and to streamline its macroeconomic forecasting tools. It also intends to develop and introduce an automated Big Data processing system, and to coordinate its efforts with other government bodies in order to deliver price stability and foster the development of financial markets, thus enhancing the impact of monetary instruments on inflation and economic growth.

The NBU will explain the rationale for, and the consequences, of its monetary policy decisions to the general public, businesses, and financial market participants, in particular by continuing the practice of publishing summaries of discussions about the key policy rate by Monetary Policy Committee members. It will also hold meetings with journalists, experts, money market participants, academics, and students in the city of Kyiv and in other regions.

Stable, Transparent, and Effective Banking System
In achieving this strategic goal, the NBU will, in cooperation with the Ukrainian government, establish independent supervisory boards at state-owned banks. In 2019, the regulator plans to put into place methodology for calculating and introducing the net stable funding ratio (NSFR) and new regulatory capital structure. It also intends to revise internal control requirements for banks, improve and automatize its supervisory functions, and to streamline banks' internal financial monitoring systems.

The NBU will provide regulatory support for various aspects of corporate governance at banks, and will continue to harmonize prudential requirements for banks with EU law and the recommendations of the Basel Committee on Banking Supervision. It also intends to apply a risk-based approach to more aspects of banking supervision and licensing. The NBU will conduct regular stress tests, SREP assessments, and analysis of bank plans to deal with nonperforming loans.

Resumption of lending
In order to revive lending, the regulator will impose requirements for managing non-performing exposures at banks. These will be based on the ECB's recommendations.

The NBU will provide regulatory support for the development of the secondary market of non-performing loans, and improved protection of creditor and investor rights on the primary real estate market. It will also help banks gain access to the state registers of customer data, and will promote the practice of using the financial restructuring mechanism at banks.

Effective Regulation of the Financial Sector
The meeting of this goal involves plans to implement a consolidated target model for regulating and supervising the financial sector (once the relevant draft law has been adopted), to enter into an agreement with a central securities depository to open an account at the NBU Depository, to improve the rules for issuing licenses to nonbank financial institutions, and to centralize the depository function in Ukraine: reaching agreement with the National Securities and Stock Market Commission and the National Depository of Ukraine on the terms and conditions for the transfer of the function of holding domestic government bonds from the NBU Depository to the National Depository of Ukraine; and contributing to the development of new capital market infrastructure on the basis of the international standards set by the EMIR, the PFMI and the IOSCO.

Free Movement of Capital
The NBU intends to further update its currency regulations according to the principles and provisions of Ukraine's Law On Currency and Currency Operations, contribute to the introduction of OECD principles on base erosion and profit shifting (BEPS) in Ukraine (which requires passing a draft law on the implementation of the BEPS Action Plan), to adopt international electronic data interchange standards (by passing and putting into place relevant implementation draft laws, adopting the FATCA, and signing the OECD Multilateral Competent Authority Agreement).

The central bank plans to gradually liberalize/lift restrictions on FX transactions, in accordance with its road map and provided there are no threats of financial destabilization.

Financial Inclusion
In 2019, the NBU intends to develop national financial inclusion and financial literacy strategies, introduce the international bank account number (IBAN); put into place requirements for providing consumers with information about financial services; regulate the use of BankID, which enables the remote identification of retail customers; introduce a standard that would allow payment market participants to make payments using QR codes; propose amendments to the legislation that governs the implementation of the EU PSD 2 (payment services draft law); establish an expert council that will be responsible for communicating with innovative companies and projects; and to provide Ukrainian banks with an opportunity to issue co-badged PROSTIR-UnionPay cards.

In 2019, the NBU will be involved in efforts to enhance the protection of financial services consumers and promote financial inclusion in Ukraine, foster the development of innovative financial services, interact more actively with participants in the financial services markets, and promote paperless technologies in the central bank and in the banking system by simplifying regulations on the use of qualified electronic signatures and electronic signatures. The central bank also plans to hold economic information days in Ukraine's regional centers in order to raise the economic and financial awareness of the general public, and to inform them of the opportunities and advantages of using remote BankIDs to obtain financial and other services.

A Modern, Open, Independent, and Effective Central Bank
The NBU plans to develop strategy and development plans for its brand and for international cooperation, establish an expert platform, and launch a new website to replace the old one. In 2019, in line with its strategic priorities, the regulator also intends to introduce mid-term financial planning, and to put in place a process management policy, which is a tool for implementing the central bank's strategy.

Other 2019 plans include further automating, robotizing and digitalizing the central bank's processes, reshaping processes with the logic of providing value to internal and external clients, enhancing transparency when discussing projects, in particular those involving stakeholders, and making regulatory decisions. The NBU also intends to conduct more effective communications about its mandate, and the objectives, nature, logic, results and plans of its policy and current activities, as well as providing its clients with access to the information they need to make informed decisions. To that end, the central bank will develop its brand as a employer, and develop its human capital.

The NBU's success in meeting its strategic goals greatly depends on the absence of substantial shocks in the internal and external environments in 2019. In particular, the ability to curb inflation and to deliver the free movement of capital is contingent on the health of the global economy, whether or not there is protectionist sentiment in the world. It also depends on movements in commodity prices and investors' interest in developing economies. Meanwhile, increased external military aggression could threaten not only potential achievements, but also those of previous years.

The full text of the National Bank of Ukraine Strategy. Action plan 2019 is available on the NBU official website athttps://bank.gov.ua/doccatalog/document?id=88661640

Part 3. Resources, Risks and Relations

3.1. Financial Resources

In order to operate, the NBU employs capital resources, including paid-in capital and earned capital.

Paid-in capital refers to authorized capital owned by the state, and amounts to UAH 100 million. A part 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
- revaluation reserves raised to cover unrealized loss from the revaluation of financial instruments, monetary gold, and investments metals
- other reserves that are the sources of investment financing to support NBU operations.

For detailed information on the management of NBU capital refer to note 20 of the consolidated financial statements of the NBU.

The NBU operates in line with its administrative budget. The administrative budget is drafted for the year ahead and approved by the NBU Council. The administrative budget includes:

- the budget (personnel costs, administrative and other expenses, depreciation and amortization charges)
- provisioning on assets, and other provisioning
- the investment budget (for accumulating and expanding logistic resources at the NBU, and at associated and other companies).

NBU administrative expenses (including expenses of the Settlement Center) 2018-2019

	Plan for 2018	Performance in 2018	Extent of plan performance in 2018	Plan for 2019
				(in UAH million)
Personnel costs	1,577	**1,459**	93%	1,828
Administrative and other expenses	1,157	**800**	69%	1,257
Depreciation and amortization charges	249	**237**	95%	247
Total administrative expenses	2,983	**2,496**	84%	3,332
Provisioning on assets, and other provisioning	1,502	**-2,576**	-271%	-655
Investments in accumulating and expanding logistic resources, and in procurement	543	**157**	29%	784

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

According to the results for 2018, administrative cost-effectiveness was 16% on average. Furthermore, funds intended to cover liabilities remained unused; instead, the effective performance of the units managing problem assets helped eliminate some forecast expenses and release previously raised provisions. Also, most of the funds intended for expanding the logistic resources of the NBU remained undrawn.

3.2. Nonfinancial Resources

3.2.1. NBU Staff. Remuneration

As of 31 December 2018, the NBU's staff amounted to 4,677.5 FTEs[1] (as at 31 December 2017 – 4,943.5 FTEs).

In 2018, employee numbers decreased by 266 FTEs or 5.4%, due to assignment of cash delivery functions in Ukrainian regions to authorized banks.

As at 31 December 2018, the average age of an NBU employee was 44 years, and the average employee tenure for the NBU was 12 years. NBU employee gender distribution is as follows: the NBU's central office employs 51.8% females and 48.2% males, the Banknote Printing and Minting Works – 32.6% females and 67.4% males.

Remuneration (pay) of NBU employees is set out in the Regulation on remuneration (pay) approved by the NBU Board.

The NBU's employee remuneration policy:

- intends to create conditions and incentives for employees to produce quality performance and put maximum effort into working to achieve the NBU's strategic goals, and perform the main assignments and functions of the NBU, as set out in the Law of Ukraine *On the National Bank of Ukraine*
- sets out the main principles for determining the remuneration level of NBU employees, including such principles as fairness, transparency, competitiveness, and flexibility
- estimates the statistical remuneration rate on the labor market, which the NBU uses as reference. NBU remuneration levels must not be lower than the third quartile in the general labor market (including in the banking, financial and IT sectors)
- is based on a grading system of positions.

The NBU provides the following components of remuneration:

- basic component, i.e., the basic salary in the form of official rate of pay. Salaries are set within the position grade range, which is reviewed at least once a year
- variable component, i.e., extra salary in the form of raises, bonuses and premiums
- other remunerations, namely, financial assistance for the medical treatment of employees and their family members, retirement or redundancy pay.

For more information on salary expenditures of the NBU refer to notes 24 and 35 of the NBU Consolidated Financial Statements.

Personnel Training

In 2018, the NBU spent UAH 5.4 million on personnel training, of which UAH 2.3 million was spent on training abroad (UAH 5.9 million in 2017).

3.2.2. Efficiency of State Property Management

In 2018 and 2017, for the purpose of fulfilling regulations of the Cabinet of Ministers of Ukraine in line with the Strategy for managing the NBU's real estate, the management of some state-owned real estate was transferred from the NBU to other bodies authorized to manage state property.

The outcomes of these asset transfers are set out in note 11 of the NBU Consolidated Financial Statements.

In order to perform its main function, i.e., providing for the circulation of cash in the country, the NBU entered into lease agreements in the cities of Chernihiv and Kherson. A joint project is underway on developing a delegated model of cash circulation in the country by leasing premises to authorized banks for storing cash stocks of the NBU.

3.2.3. 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.

For more information on types of collateral and the extent of coverage of loans issued to banks, refer to note 28 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.

In 2018, in order to repay the loans of insolvent banks UAH 2,594 million in pledged assets were sold, whereof UAH 2,509 million or 96.7% of the collateral was sold without the NBU's appropriation, mainly through the Deposit Guarantee Fund (hereinafter referred to as the "DGF"), and only UAH 85 million or 3.3% was appropriated by the NBU through debt enforcement (in 2017 the total was UAH 2,129 million, of which most was sold through the DGF

[1] Full-time equivalent of staff employed by organizational units (excluding employees on parental leave).

– UAH 2,072 million, and the NBU appropriated UAH 57 million through debt enforcement).

In 2018–2017, to discharge debts, the NBU alienated and appropriated the following assets:

	2018			2017		
	Through DGF	Through third parties	Total	Through DGF	Through third parties	Total
						(in UAH million)
Repayments at the expense of sale of pledged:						
real estate	**676**	**6**	**682**	46	7	53
securities and investment metals	**435**		**435**	726		726
property rights to secured loans	**1,392**		**1,392**	1,293		1,293
Total repayments at the expense of sale of collateral	**2,503**	**6**	**2,509**	**2,065**	**7**	**2,072**
Repayments through NBU appropriation of title to:						
real estate		**85**	**85**		57	57
Total	**2,503**	**91**	**2,594**	**2,065**	**64**	**2,129**

In line with the Law of Ukraine *On the National Bank of Ukraine,* the National Bank of Ukraine may sell the property that it obtained from banks to recover money it loaned to the banks with the purpose of supporting the NBU's liquidity, without the approval of other public authorities.

The NBU alienates appropriated assets at the highest price as soon as possible via electronic trading/auctions. Electronic trading is the favored method for the alienation of appropriated assets. Appropriated assets are sold at an auction, in cases prescribed by Ukrainian law, unless the trading organizer is authorized to alienate certain types of property.

The appropriated assets are put up for electronic trading/auction at the market value estimated based on the property appraisal report drafted by an independent appraising agency and subject to mandatory review.

Electronic trading/auctions foresee an automatic step-by-step decrease in the original asking price by 10% every 14 days, but not less than the set minimum sale cost. In the case of a repeated auction (if the previous auction failed), the original estimated value of assets may be reduced.

In 2018, the NBU announced 192 auctions for the sale of the appropriated assets.

The NBU services the appropriated assets until their alienation, including paying for asset security, connection to the electric grid, power supply, heating and other utilities, taxes, charges for asset appraisal and the review of appraisal reports, the assets sale procedure and the drafting of documents. In 2018, NBU expenses associated with servicing the appropriated pledge amounted to UAH 2.4 million (in 2017, UAH 1.5 million).

As at 31 December 2018, six pledged items with a total value of UAH 188.0 million were sold, the average depreciation was 14.7% of the value estimated by the appraising agency (as at 31 December 2017, one pledged item worth of UAH 1.9 million without revaluation was sold).

3.2.4. IT Development

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

The year 2018 became the first year of implementation of the new generation of the SEP (SEP-3) through shifting the SEP to a new platform, i.e., a commercial server environment application, which improved its speed and reliability.

In 2018, the SEP handled 357.2 million transactions (1.43 million per day on average) with a total value of more than UAH 25.3 trillion. The average ratio of cash circulation was 159%, some days peaking at more than 370%. Thus, the SEP grew 7%, transaction value grew 21%, and the ratio of cash circulation increased 59%.

In line with the Development of Ukrainian Payment Infrastructure Based on ISO 20022 project, as the first step to harmonizing the formats of SEP electronic payment documents with ISO 13616 international standards, the IBAN international bank account number was introduced into the SEP, and the respective new generation of the SEP (code name SEP-3.2) was designed. In 2018, terms of reference were drafted for SEP-3.2, new formats of information exchange were developed and provided to SEP participants, SEP software was designed, and a SEP-3.2 stand was put into operation for SEP participants.

In 2018, the Development of the NBU Virtualization System project was completed – the virtualization system software was updated and an easily accessible NBU private cloud was launched, new servers to improve computing power were installed, a virtualization system was introduced for data storage systems based on IBM SVC, and the capacity of the data storage system was increased. Thus, new information systems, along with hardware and software suites, were introduced in the upgraded automated virtual environment. To ensure the operating continuity of the information systems of the NBU, all critical information is uploaded to the private cloud.

In 2018, *the Credit Register of the National Bank of Ukraine* information system was developed to analyze financial system conditions and ensure financial stability.

Throughout last year, work to ensure the stable operation and development of the NBU SAP continued, including upgrading and introducing new projects and assignments. In 2018:

- the process for managing procurement and contractual operations was introduced to the NBU SAP
- preparations were made for shifting SAP ERP EHP8 in 2019 to a new platform – S/4HANA
- the Optimizing Record-Keeping and Moving Based on Record-Keeping and Moving Computer Equipment project was implemented
- work was done on the Comprehensive Automation Program of NBU Processes Based on SAP Solutions project
- software for loan treatment was applied and respective reporting was drafted with respect to the introduction of IFRS 9
- software for pledging pools of assets for refinancing loans was developed and put into operation, and software was developed for selling employee loans.

Upgrading the Reporting System and Advancing Open Data

The NBU completed the last stage of upgrading statistical reporting in line with the three-year Reengineering the Processes of Collecting, Processing, and Using Bank Statements and Information project. The project resulted in introducing cutting-edge technologies for collecting and disbursing statistical reporting data.

As part of the project, the NBU completely abandoned the practice of collecting reporting statements in printed form by regulating the use of the electronic signatures, introduced the XML format for the submission of reporting statements via the NBU web-site, and shifted to the use of open channels for collecting and disbursing information through API, with a high degree of information security.

Data transferring became much easier, as banks can now even use proprietary software. To accommodate reporting institutions, the NBU also developed a public ledger of statistical reporting indicators based on a data model, and published a detailed description of benchmarks, formulae and required guidelines.

According to the project, the NBU drafted new Rules on Statistical Reporting (approved under Resolution of the NBU No. 120 dated 13 November 2018).

In 2018, in order to bring reporting of the financial sector into line with the European standards, the NBU drafted Rules for Preparing and Releasing Consolidated Financial Reporting of Bank in line with FINREP XBRL Taxonomy. This document creates the foundation for the transition to submitting the NBU's reporting to European regulators.

The NBU also continued upgrading its monetary and financial statistics system according to international and European standards. In particular, new concepts and classifications of financial corporations were introduced according to economic sectors, in line with the revised standard of the System of National Accounts, financial asset and liabilities in light of the introduction of IFRS 9, loans with a breakdown by small, medium and big business entities, and securities with a breakdown by individual codes of securities.

Considering the major changes in migration flows, the NBU improved the methodology for estimating personal remittances, and clarified estimates for 2015–2017. Data from Ukraine's main partner states, the findings of the last survey of the State Statistics Service of Ukraine (hereinafter referred to as the "SSSU") on labor migration, and new approaches to estimating data in some countries improved the estimation of private remittances and the accuracy of balance of payments data.

Revisions also addressed foreign direct investment statistics. The NBU has assumed from the SSSU the function of generating data on the banking sector's foreign direct investments and conducted a retrospective revision of external sector statistics, taking into account banks' reinvested earnings. The new approaches approximate the value of direct investments given market realities, and reduce discrepancies between the NBU's and the SSSU's data.

The NBU significantly increased the set of monetary and financial statistics and made them available on its website in XML and JSON formats via the API. To comply with the openness principle, the distribution has begun of data sets of balance sheets and reviews of financial corporations, along with a broad range of bank performance indicators, both aggregated and with a breakdown by banks. Public information on the external debt of Ukraine was expanded, and a quarterly publication of scheduled repayments of the external debt was introduced in order to make it easier to make a comprehensive analysis of potential liquidity risks and solvency risks for the national economy.

3.3. Main Risks

NBU's 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** fall into the following categories:

- financial risks related to the policy developed and implemented by the NBU. 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 repurchase of domestic government bonds.
- financial risks posed by Ukraine's international (foreign exchange and gold) reserves
- 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 reputational 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. NBU units operate within the set levels of risk appetite.

The NBU's risk profile saw no major change in 2018.

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 financial risk management policy covers all assets and liabilities of the NBU (both on- and off-balance-sheet ones).

Notes 26–31 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.

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
Under the comprehensive program for the NBU's development until 2020, as part of the *Internal Control System Implementation* project, the NBU has introduced a unified, structured approach and requirements to internal controls in order to ensure the effective implementation of the NBU's functions, its stable and continuous operation, cooperation between NBU units at all organizational levels, and the fostering of corporate culture in terms of the organization and development of the NBU's internal control system.

Business Continuity Management
The NBU's operational continuity management includes:

- 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
- carrying out annual training for key NBU employees that deal with critical processes and IT resources, as well as those that work on engineering infrastructure systems.

3.4. NBU and Its Stakeholders

The NBU is a participant in the financial ecosystem. In most cases, the NBU's capacity to achieve its strategic goals directly depends on the actions of other participants. The NBU is not able to involve stakeholders in achieving its goals in a prescriptive manner. However, the NBU's goals not only imply the implementation of the regulator's mandate as provided for by the law – they are also key to the economic wealth of all participants in the Ukrainian economy. The NBU's achieving its goals is important, and mutually beneficial from a historical viewpoint. The NBU is open to constructive cooperation with all stakeholders who are its customers, and encourages all of them to join efforts to develop the Ukrainian economy and financial system.

To ensure the proper performance of its functions, the NBU must effectively engage with all participants in the financial ecosystem and take into account their needs and interests. The NBU classifies participants in the financial ecosystem into six client groups according to their role therein:

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

The NBU interacts with all the client groups. Six of the seven strategic goals of the NBU are aimed at satisfying the needs of its clients.

The NBU delivers the following products to its clients:

experts: analytical reports, discussion platforms

policy makers in charge of economic and financial policy: regulatory proposals, explanations of regulations and results expected from their implementation, analytics

financial sector entities: methodology, supervision, supporting mechanisms, the key policy rate and other monetary instruments, infrastructure solutions

business entities: regulations on using financial instruments, the key policy rate as a tool to manage the cost of credit, foreign exchange regulation

the state as a services provider: analytical reporting, payment infrastructure, financial monitoring, financial literacy programs

Ukrainian citizens: payment infrastructure, consumer rights protection for financial services, hryvnia cash.

In 2018, the NBU fruitfully cooperated with state agencies and international organizations while performing its functions.

3.4.1. Cooperation with Government Authorities

Financial Stability Council
The council was established by a Presidential Decree in 2015. Its mandate is to identify and mitigate in a timely manner risks that pose a threat to the stability of the banking and financial systems.

The major task of the Financial Stability Council is to share information, identify and monitor systemic risks, develop recommendations to eliminate and reduce the impact of systemic risks in the financial system of Ukraine, agree pre-emptive or quick-response actions in the case of instability, and balance internal and external communication in cases of crises in the financial system of Ukraine. The Council's decisions are nonbinding recommendations.

Co-chairs of the Financial Stability Council:

Yakiv Smolii, NBU Governor

Oksana Markarova, Minister of Finance of Ukraine

Members of the Financial Stability Council:

Tymur Khromaev, Head of the National Securities and Stock Market Commission

Ihor Pashko, Head of the National Commission for the State Regulation of Financial Services Markets

Kostiantyn Vorushylin, Managing Director of the Deposit Guarantee Fund

Kateryna Rozhkova, NBU First Deputy Governor

Yurii Heletii, Deputy Minister of Finance of Ukraine for European Integration.

In 2018, the Financial Stability Council held three meetings.

In July 2018, the Financial Stability Council, based on a respective resolution, established a committee (a task force) to deal with NPLs at state-owned banks. The committee is expected to develop and deliver NPL-related recommendations to the management bodies of the state-owned banks. The first meeting of the committee was held in October 2018.

Cooperation with Government Authorities under Financial Sector Reforms

In order to achieve the sustainable development of the financial sector, since 2015, the NBU jointly with other regulators of the financial sector is implementing the Comprehensive Program of Ukrainian Financial Sector Development Until 2020 (the Comprehensive Program), which embraces the whole financial market, and unites and synchronizes the actions of the market's regulators and participants. Once implemented, major activities under the Comprehensive Program will require inter-agency coordination.

An external project office, made up of 12 project managers and analysts and created with the support of the European Bank for Reconstruction and Development, has joined the team of project managers from financial regulators to jointly implement the Comprehensive Program. Their work is targeted at implementing interagency projects.

As a driver of the reforms in the financial sector, the NBU cooperated actively with the National Securities and Stock Market Commission, the National Commission for the State Regulation of the Financial Services Markets, the DGF, the Committee on Financial Policy and Banking of the Verkhovna Rada of Ukraine, the Cabinet of Ministers of Ukraine, ministries, state agencies, representatives of professional organizations and businesses, and experts. As part of cooperation with the government on the reforms, the Government's Action Plan for Priority Measures for 2018 and 2019 was supplemented with some items from the Comprehensive Program.

To implement legislative changes, the NBU constantly requires cooperation with the Verkhovna Rada of Ukraine. Last year, the NBU pursued its aim of improving legislation, and cooperated fruitfully with the Financial Policy and Banking Committee of the Verkhovna Rada of Ukraine. In 2018, the Verkhovna Rada of Ukraine adopted five priority legal acts to support banking sector reforms, namely, acts on: the NBU Credit Register, the Bankruptcy Code, Currency and Currency Operations, the Protection of Creditors' Rights, and Improving the Financial Sector of Ukraine. In addition to cooperation in the legislative space, the NBU exchanges information on an ongoing basis with the Verkhovna Rada of Ukraine.

In 2018, the NBU also cooperated with the National Reforms Council. In March 2018, the NBU Governor presented the draft Law of Ukraine *On Currency and Currency Operations* during a meeting of the National Reforms Council. The draft law gained the National Reforms Council's support. It was then submitted by the President of Ukraine to the Verkhovna Rada of Ukraine as priority legislation, and was adopted by the Verkhovna Rada of Ukraine in June 2018.

3.4.2. Cooperation with International Partners

The NBU continues to be involved in active efforts to integrate into the global financial system, by deepening cooperation with its international partners and supporting global initiatives for banking regulation. In this way, the NBU demonstrates its willingness to become a partner, and its openness to cooperation and the fostering of multilateral and bilateral relations.

While cooperating with the IMF in 2018, the NBU took all of the measures required under the IMF Extended Fund Facility. The central bank also participated in talks regarding a new Stand-By Arrangement for Ukraine, which provides about USD 3.9 billion in financing, and which was approved by the IMF Executive Board on 18 December 2018. The first tranche of USD 1.4 billion, which arrived on 20 December 2018, was used to replenish international reserves. Apart from that, the NBU finalized arrangements with the World Bank regarding the Economic Growth and Fiscally Sustainable Services Policy Based Guarantee for Ukraine, worth USD 750 million. Ukraine's Finance Ministry used these guarantees to attract loans of EUR 349.3 million in December 2018 and to finance the general fund of the state budget.

The NBU also played a role in Ukraine's securing EUR 1 billion in financing under the fourth Macro-Financial Assistance program for Ukraine. Ukraine received the first tranche of EUR 500 million of this loan in December 2018. It was used to improve the country's balance of payments, support the budget, and replenish international reserves.

The NBU's staffers also represented Ukraine in the management bodies of international financial institutions. In 2018, the central bank's representatives participated in the Annual and Spring Meetings of the International Monetary Fund and World Bank Group, the Annual Meetings of the European Bank for Reconstruction and Development, the Black Sea Trade and Development Bank, and the Bank for International Settlements.

With a view to successfully carrying out financial sector reform, the NBU also strengthened cooperation with international institutions and unions within the scope of existing technical assistance projects. In 2018, technical assistance was provided by the major international donors, in particular: the EU, IMF, World Bank Group, EBRD, and USAID. International donors are assisting in the implementation of 37 of 42 projects under the Comprehensive Program.

The NBU also cooperated with other central banks within the scope of technical assistance in the areas of monetary policy, communications and financial literacy, payment systems, financial stability and market operations.

Over the course of the year, the NBU held a number of international round table meetings, dedicated seminars, bilateral expert events and meetings for other central banks at which participants talked about the main achievements of, and challenges for, their institutions in various areas. At these events, the NBU shared its experience in carrying out unprecedented banking sector reform and internal organizational transformation.

More than once, the NBU's achievements have been acknowledged by the EU, the IMF, the World Bank, other international organizations and institutions, and other central banks. The main partners with which the NBU exchanged professional achievements and experience in 2018 were the central banks of the Republic of Turkey, Poland, Sweden, Lithuania and Belarus.

It is precisely the comprehensiveness and large scale of the changes carried out by the NBU that is pushing up the number of requests for technical and expert assistance submitted by other central banks. From now on, other central banks will be asking the NBU for technical assistance. The NBU's leading experts have also been invited to take part in the technical missions of international financial institutions, such as the IMF and the EBRD.

A Regulator that is Predictable for Foreign Investors

More specifically, in 2018, the NBU had several meetings with private and institutional investors, both in Ukraine and abroad. With a view to raising awareness about the investment climate in Ukraine, the NBU also took part in roundtable meetings with business community representatives held in Canada, the UK, the United States and Switzerland.

The NBU participated again in the Annual Ukraine Investor Conference hosted by Dragon Capital, which brings together government officials and representatives of Ukrainian and foreign businesses. In March 2018, the NBU also presented its internal transformation achievements and the results of Ukrainian banking sector reform at the Harvard and Yale Law Schools.

European Integration

In 2018, the NBU was involved in efforts to implement the EU-Ukraine Association Agreement. The central bank focused on adapting national laws to European law in the areas of banking regulation and supervision, capital market liberalization, and the operation of payment systems.

The NBU, together with other government authorities, engaged in a new area of European integration – integration into the EU's digital single market. This integration envisages:

- easing online access to goods and services
- delivering the right conditions for the development of digital networks
- fostering the growth of the digital economy.

Striving to achieve a gradual shift to free capital movement, the NBU developed new currency legislation that enabled the long-awaited transition to a new transparent model of currency regulation.

In 2018, the NBU was also engaged in preparing legislative proposals and initiatives in the areas of:

- anti-money laundering
- protection of financial services consumers' rights
- countering base erosion and profit shifting
- accounting and auditing
- corporate governance.

In 2018, the NBU also participated in the bilateral meetings on EU-Ukraine association.

Part 4. Overview of Key Indicators

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

The NBU's financial statements are consolidated financial statements that reflect the assets, liabilities, and profits or losses of the NBU, its subsidiary, and profits or losses of the associated companies in accordance with its share of their ownership.

As of the end of 2018, the NBU's balance-sheet total increased by 2%, to UAH 1,049 billion.

In 2018, the central bank continued to execute its functions, forming the corresponding profile of its assets, liabilities, and equity.

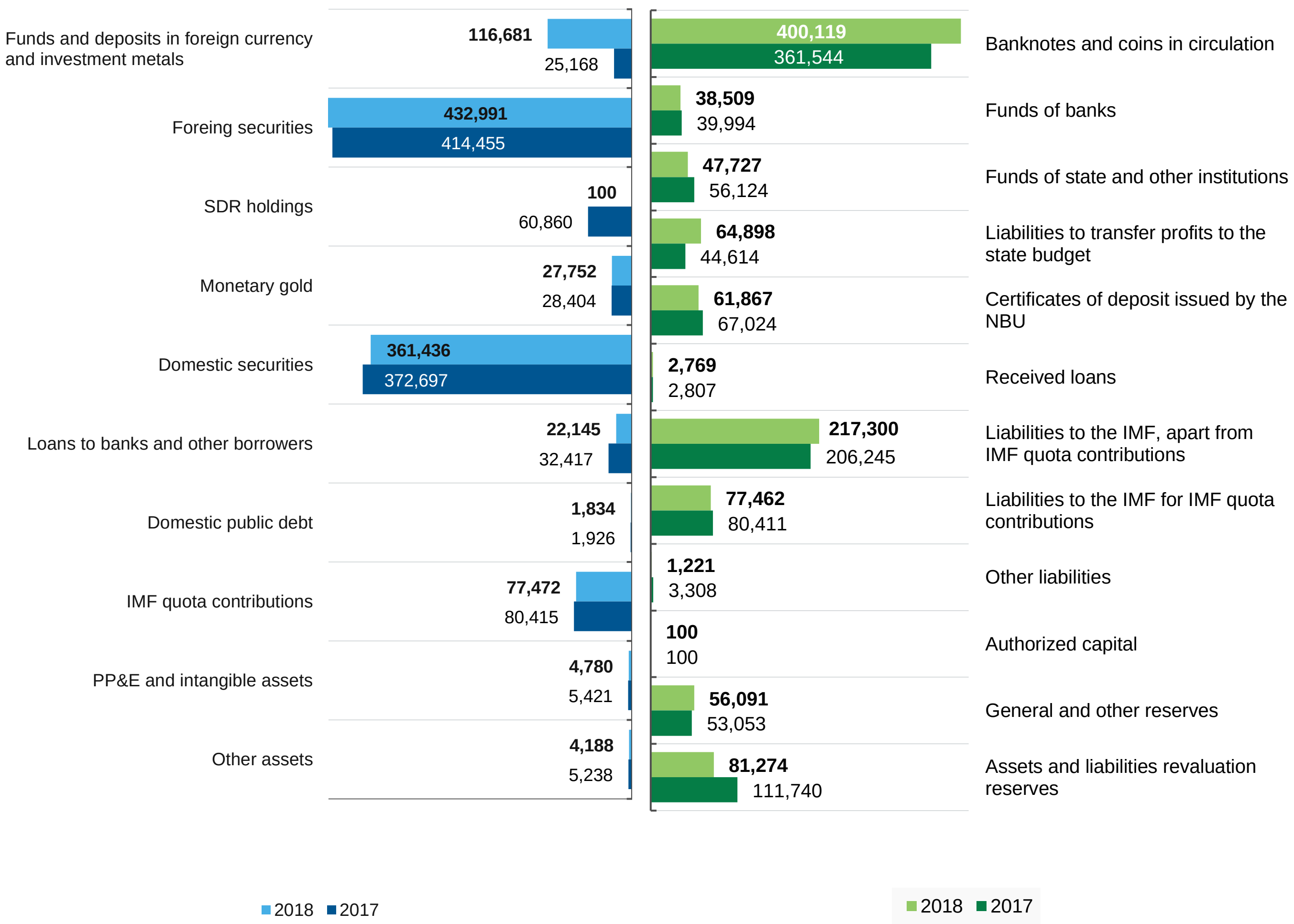
The NBU's assets mainly consist of:

- 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, apart from IMF quota contributions
- liabilities to the IMF for IMF quota contributions
- the funds of banks, state institutions, and other institutions
- liabilities to transfer distributable profit to the State Budget of Ukraine
- certificates of deposit issued by the NBU.

Figure 1. NBU's assets and liabilities in 2017–2018, UAH million



The following changes occurred in the NBU's assets and liabilities in 2018.

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

Overall, international reserves rose by 10.6%, to USD 20.8 billion as of year-end 2018, up from USD 18.8 billion at the end of 2017. Unlike in previous years, in 2018 the increase in international reserves was due to absolute growth in their amount, as the hryvnia strengthened against foreign currencies at the end of the year, the first such occurrence for several years. The increase in reserves was driven by FX purchases on the interbank FX market of Ukraine, and by attracting foreign currency under financing programs of the IMF and other financial institutions.

In the wake of the rise in international reserves, funds and deposits in foreign currency and investment metals grew by 4.6 times. Moreover, the portfolio of foreign securities increased by 4.5%. However, SDR holdings account for only a minor share of international reserves, as they have been almost completely depleted to pay back liabilities to the IMF and interest on the IMF loan.

At the same time, the increase in international reserves, driven by the receipt of financing under the Stand-By Arrangement in 2018, pushed up the debt owed by the NBU to the IMF on the purchase of SDRs (loans received from the IMF) by 5.4%, to UAH 217 billion (equivalent to USD 7.8 billion).

The NBU's hryvnia assets are mainly comprised of domestic securities, the value of which decreased by UAH 11.3 billion or 3.0% in 2018, to UAH 361 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 34.4% in 2018, down from 36.3% in 2017. Of the domestic securities, 99.8% 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 shrank by 31.7%, mostly due to a decrease in outstanding debts. The gross book value of loans (outstanding debts) dropped by almost UAH 12 billion, to UAH 63 billion. The amount of expected credit losses (loan loss provisions formed) also declined, by UAH 1.7 billion. Thanks to an improved macroeconomic environment and lower reliance on loans to support liquidity, banks that remained on the market after the banking system cleanup repaid their loans. Therefore, almost the entire amount of debts outstanding as of the end of 2018 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:

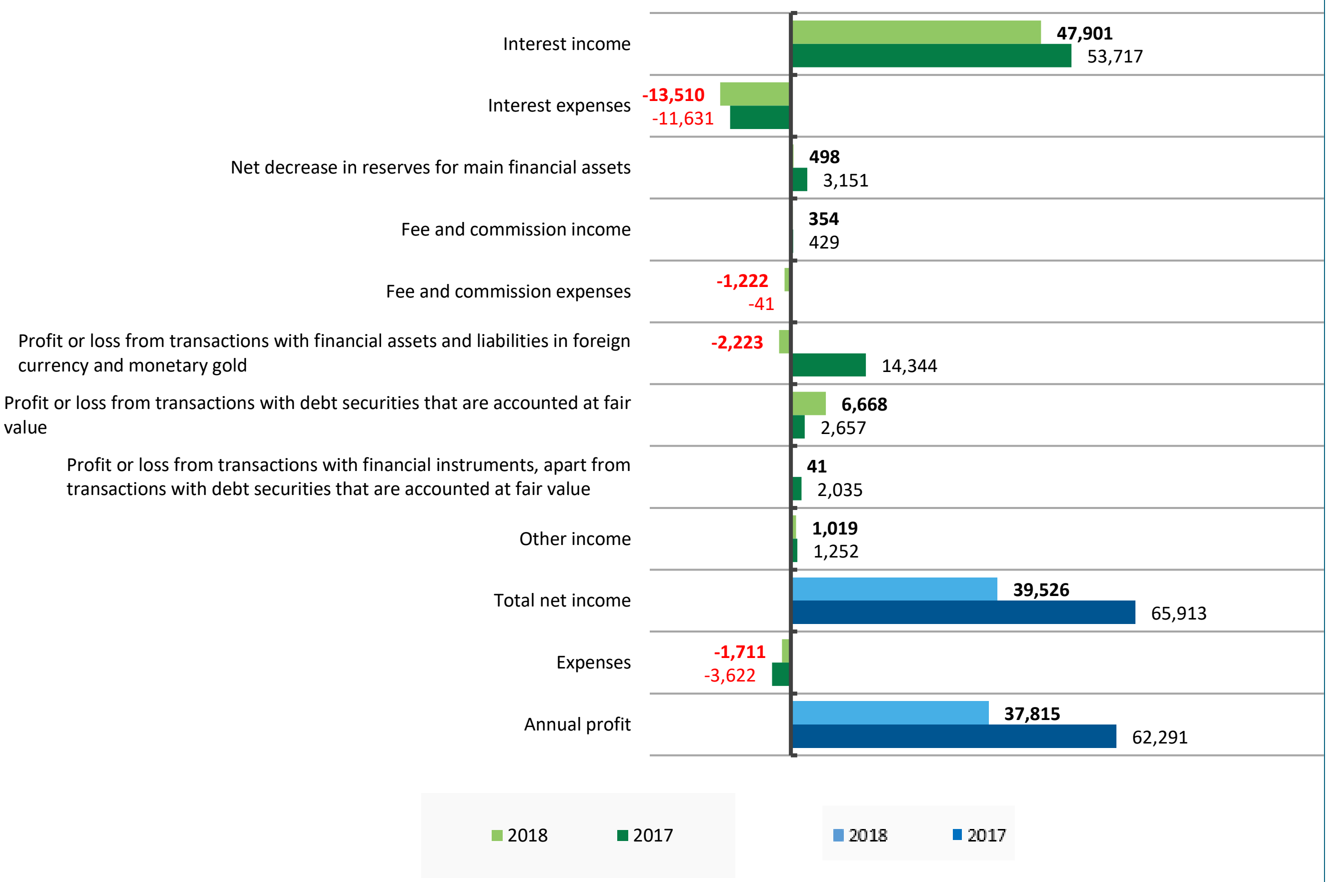
Banknotes and coins in circulation grew by 11%.
Liabilities to transfer profits to the state budget increased by 45.5%.
Funds due to state institutions and other institutions declined by 15%.
Certificates of deposit issued by the NBU decreased by 8%.

Profit or Loss

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 2017 and reached UAH 47.9 billion, accompanied by a decrease in the corresponding asset items.

Figure 2. **NBU's profit or loss in 2017–2018, UAH million**



In 2018, interest expenses increased by 16%, to UAH 13.5 billion, which was mostly due to:

higher expenses on NBU certificates of deposit as weighted average interest rates grew to 17.03% in 2018 from 13.40% in 2017

an increase in interest-bearing liabilities to the IMF.

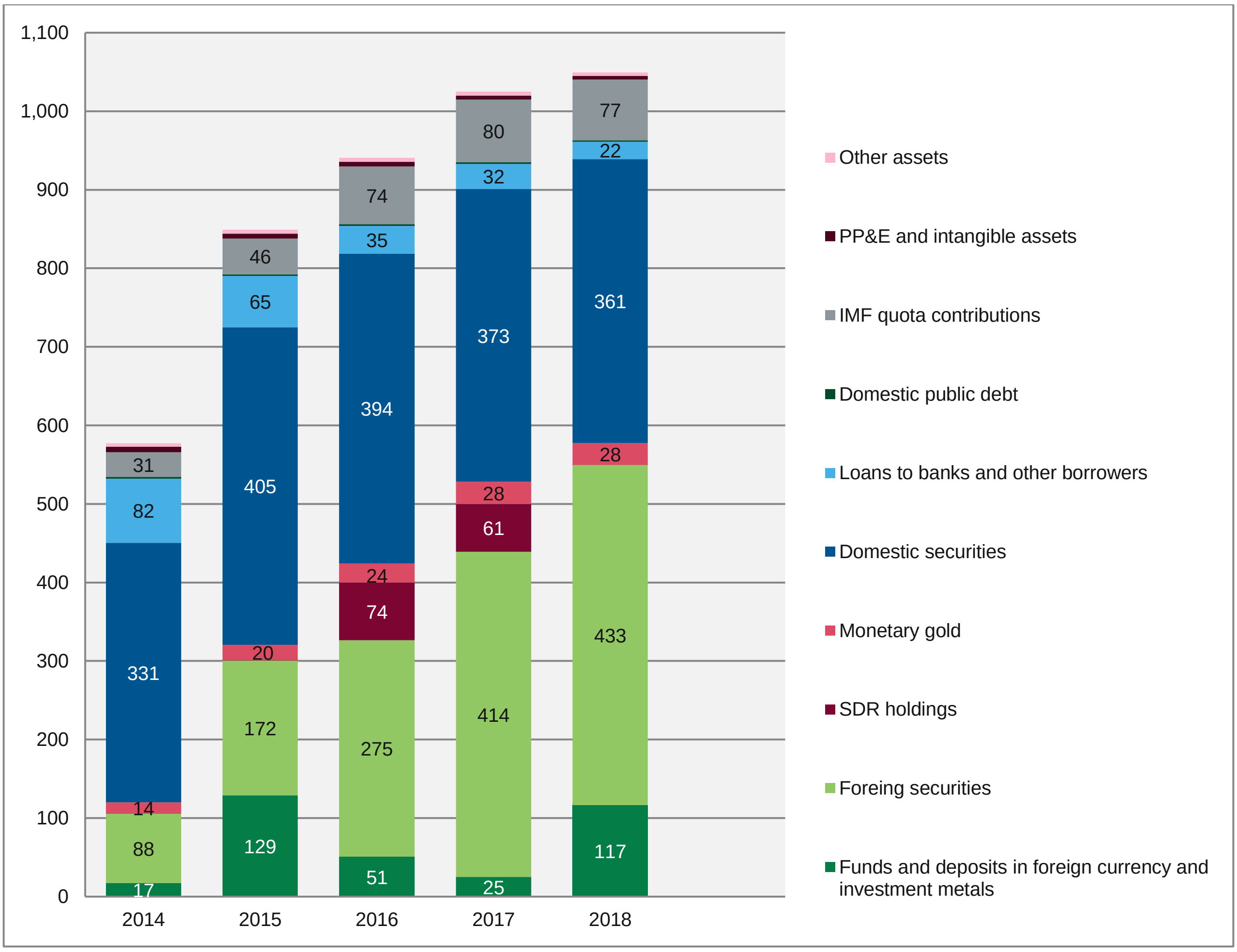
In 2018, the NBU continued to release impairment provisions for loans issued to banks, although at a slower pace. Overall, as a result of a decrease/reversal of the impairment of main financial assets, expenses decreased by UAH 498 million (UAH 3,151 million in 2017).

Net interest income (including the released impairment provisions) totaled UAH 34.9 billion in 2018, which was 23% lower than in 2017.

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 2018, the exchange difference was negative for the first time since 2013, at UAH 2.2 billion (while the total annual profit was UAH 37.8 billion). This was driven by the hryvnia strengthening against foreign currencies.

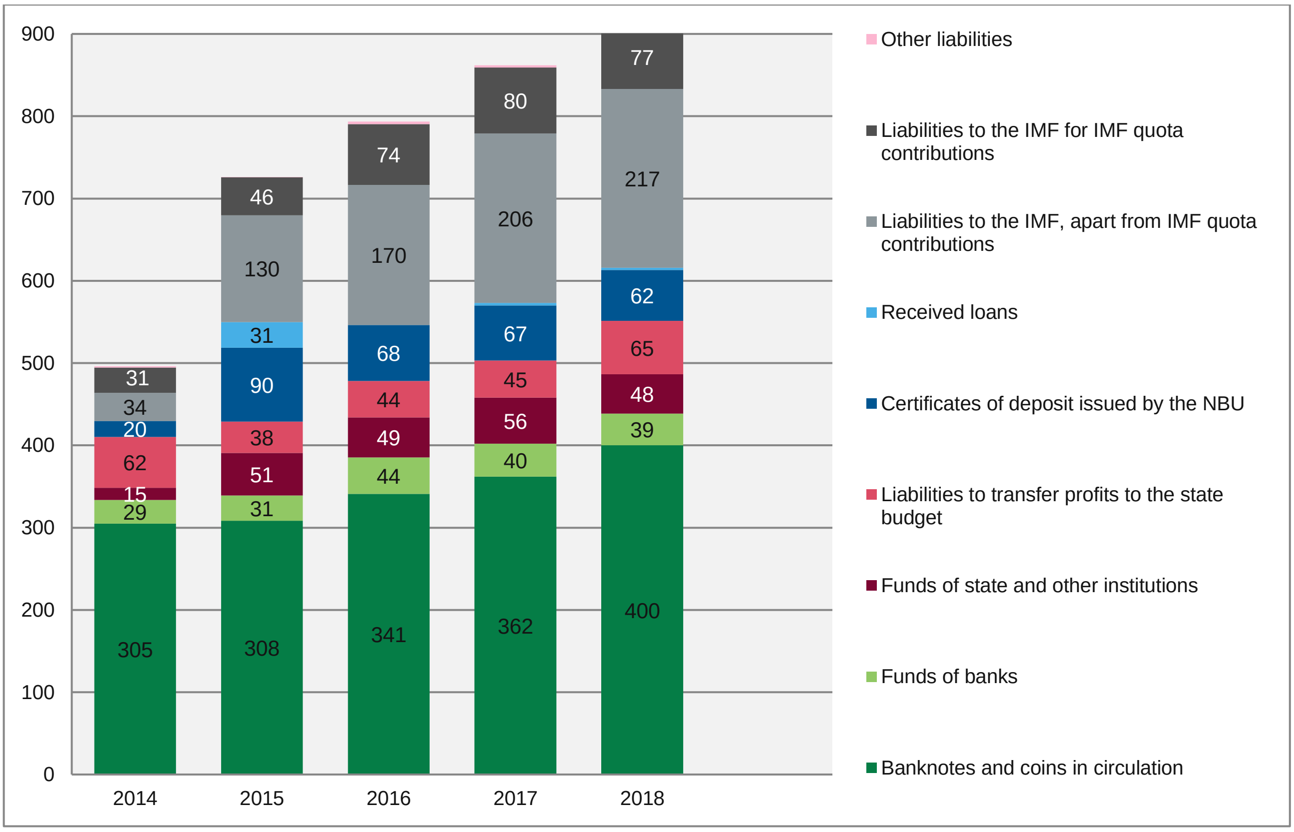
The NBU's expenses declined to UAH 1,711 million in 2018 from UAH 3,622 million in 2017, mainly on the back of the release of securities for legal obligations (as a result of past events), particularly under legal cases the settlement of which was probable (an adverse scenario being more probable than a positive one) to cause an outflow of resources that carry economic benefits.

Figure 3. NBU's assets in 2014–2018, UAH billion



Over the past five years, the main changes in the NBU's asset structure came from increases in international reserves, decreases in the portfolio of loans issued to banks, and changes in the domestic securities portfolio, which contains mostly government bonds.

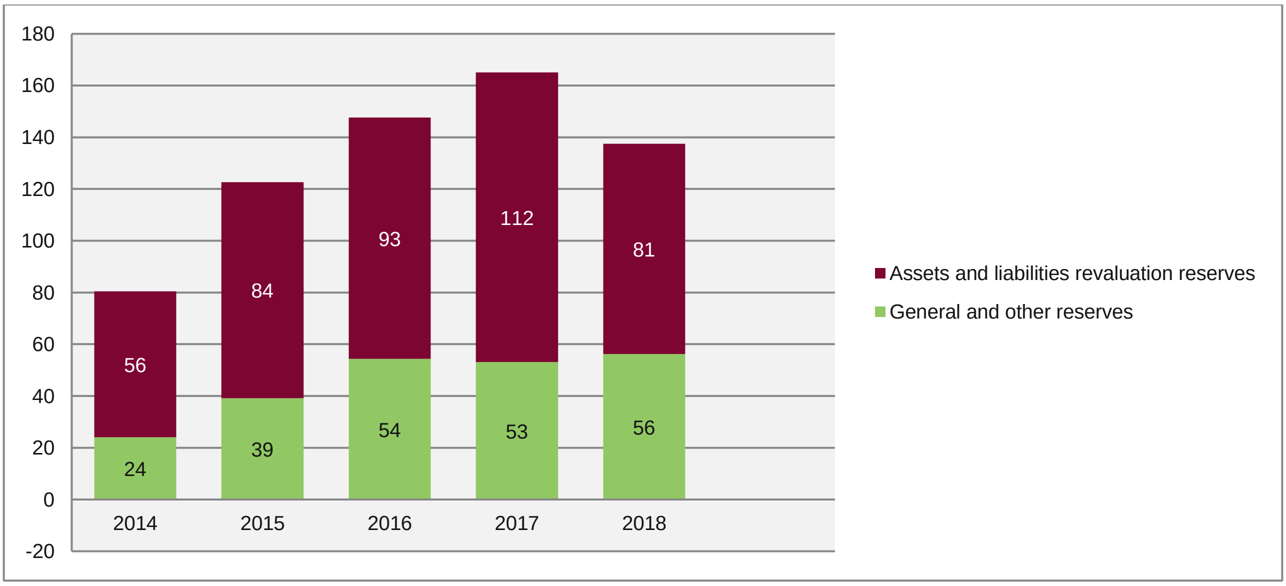
Figure 4. The NBU's liabilities in 2014–2018, UAH billion



The NBU's liabilities were diversified, with banknotes and coins in circulation traditionally being the main type of liabilities, which is common for any central bank acting as the issuer of national currency.

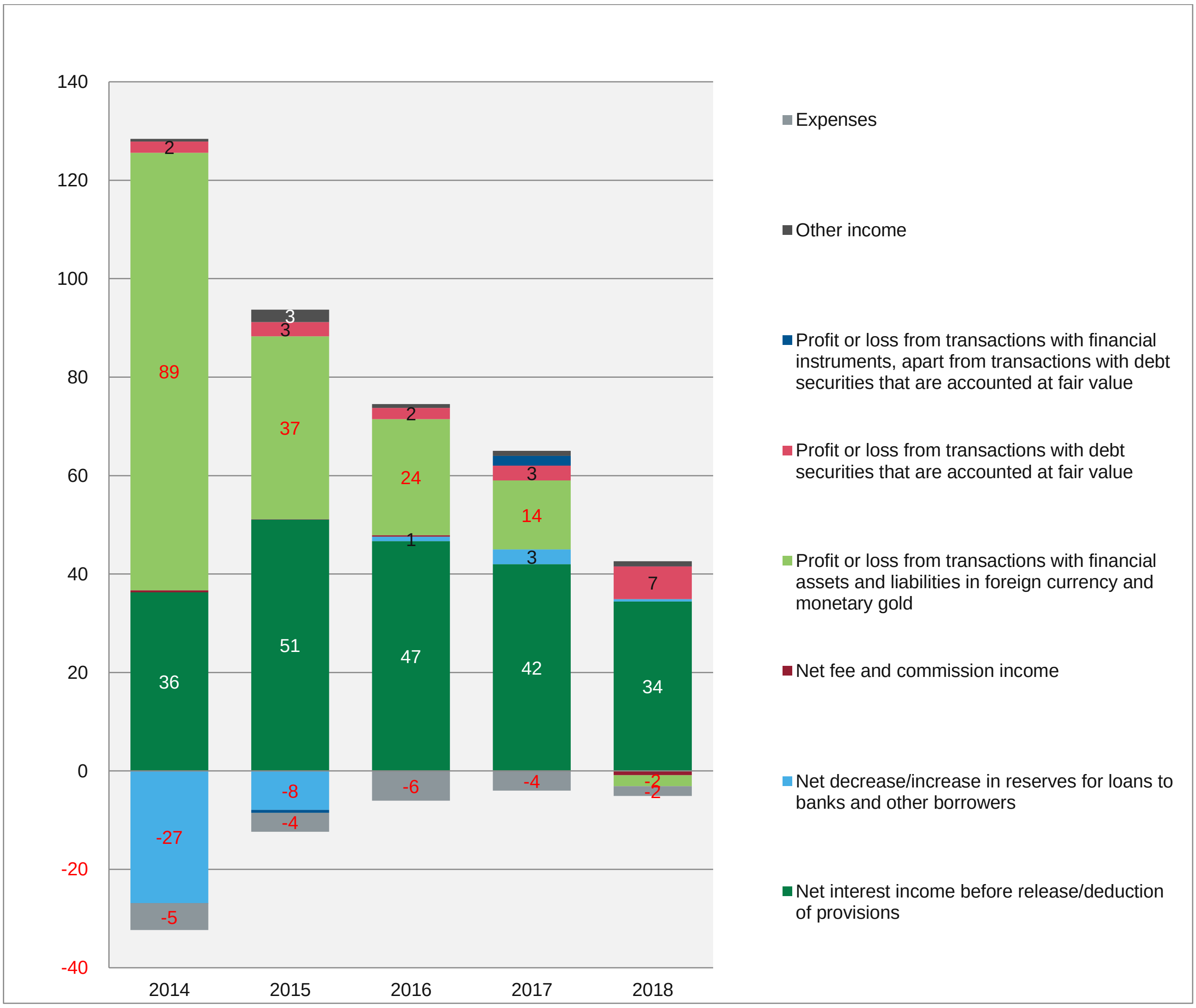
In recent years, external borrowings have grown significantly, especially liabilities to the IMF. A large portion of the NBU's liabilities consists of NBU certificates of deposit and liabilities to transfer part of the central bank's profit to the State Budget of Ukraine.

Figure 5. NBU's equity in 2014–2018, UAH billion



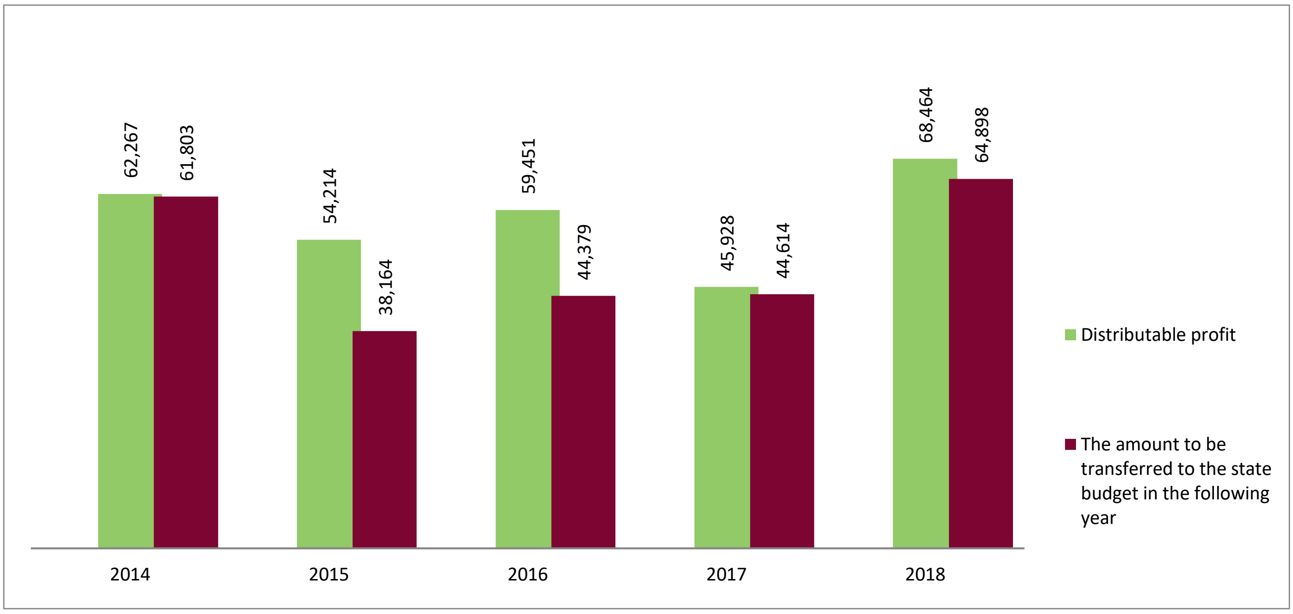
The NBU's equity, which is the residual value of assets after deducting liabilities, was mainly formed from sources other than government contributions. The NBU's equity consisted of the deferred unrealized revaluation of the NBU's assets and liabilities, including due to exchange rate fluctuations,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

Figure 6. NBU's income and expenses in 2014–2018, UAH billion



Net interest income as usual was the main contributor to the NBU's financial performance. 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. However, the share of exchange differences in the NBU's total profit declined gradually as the hryvnia exchange rate stabilized.

Figure 7. Transfers by the NBU to the State Budget of Ukraine in 2014–2018, UAH million



Payments to the State Budget
In 2018, the NBU transferred UAH 44.6 billion to the State Budget of Ukraine. As of 31 December 2018, the central bank recognized its obligation to pay UAH 64.9 billion of its profit to the state budget.

The NBU's remaining distributable profit of UAH 3.6 billion will be set aside to create general reserves of the NBU, once the central bank's financial statements are approved by the NBU Council.

The NBU's distributable profit for 2018 and the recognized liabilities to transfer funds to the State Budget of Ukraine include adjustments to past years' profits amounting to UAH 22 billion, due to the retrospective application of amendments to the NBU's accounting policy and the implementation of the new Procedure for Identifying Unrealized and Realized Revaluation Results.

Read more about the changes in accounting policy in note 2 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 19.

Part 5. Sustainable Development

5.1. Key Accomplishments

Fulfillment of Strategic Development Plans in 2018
In 2018, the NBU focused on delivering price and financial stability and implementing long-awaited financial sector reforms. As a result, the past year was marked with many peaks and records.

Maximum economic growth over seven years. A minimum level of inflation over five years. A maximum amount of international reserves over five years. The banking system is not only resilient, well-capitalized, and transparent, but also profitable – for the first time in five years. Ukrainians are getting used to cashless payments – four out of every ten hryvnias held on payment cards are spent in cashless transactions.

Ukraine entered into a new cooperation program with the IMF, which lays the groundwork for the further strengthening of macrofinancial stability. This will not only facilitate Ukraine's passage through years of significant debt load, but also sets benchmarks for state policy, thus reducing uncertainty for businesses and financial market players in an election year.

The NBU managed to achieve these results through being guided by the priorities set in the Strategy of the National Bank of Ukraine. The NBU's efforts to achieve these strategic goals were what made possible the comforting highs and record-high figures of 2018.

Key Accomplishments

Low and Stable Inflation

- Inflation declined to a five-year minimum of 9.8% in 2018, from 13.7% in 2017.
- For the first time, the NBU's inflation target has become one of the targets of a cooperation program between Ukraine and the IMF.
- The NBU upgraded its approach to making interventions on the interbank FX market.
- Better monetary policy transparency: the NBU has started to publish the *Summary of the Discussion on the Key Policy Rate at the Monetary Policy Committee*.

Stable, Transparent, and Effective Banking System

- The transition to Basel III international regulatory standards for banks was set in motion.
- A risk-oriented supervisory review and evaluation process (SREP) was implemented.
- Annual assessment of the banks' resilience was launched.
- Transparency was improved, and information disclosure standards for banks were raised.
- The NBU laid the groundwork for its macroprudential policy.
- A regulatory framework was created for information security and cybersecurity in banks.
- Approaches to organizing corporate governance at Ukrainian banks were improved.
- The NBU conducted a comprehensive review of bank licensing processes.
- New standards for the implementation of the risk management system in Ukrainian banks and banking groups were introduced.

Resumption of Lending

- Protection of creditor rights was enhanced.
- The NBU launched the NBU Credit Register.

Effective Regulation of the Financial Sector

- A draft of the future regulations of the non-bank financial sector was prepared.

Free Flow of Capital

- The Law of Ukraine *On Currency and Currency Operations* – "visa-free travel" for capital – was adopted.
- Several temporary currency restrictions for businesses and banks were loosened.

Financial Inclusion

- The capability of remotely opening bank accounts using BankID was implemented.
- Conditions were created for the transition of banks to paperless technology in customer service (without physical presence, paper, and a physical signature).
- A significant development of the PROSTIR National Payment System was made possible.
- The geography of the use of PROSTIR cards was expanded.

Modern, Open, Independent, and Effective Central Bank

- The NBU's medium-term strategy was approved.
- The NBU and the banking system applied IFRS 9 international financial reporting standard.

5.2. Research and Development

In 2018, the NBU conducted research in line with the approved *Research Priorities of the National Bank of Ukraine in 2017–2020.* In particular, in the section *Monetary Policy: Inflation Targeting Implementation*, NBU researchers assessed the neutral rate of interest, studied the spillover effects of international shocks on countries in the region, and launched the project to study disinflation in a small open economy. In the domain of financial stability (section *Financial Stability: Micro- and Macroprudential Regulation Policy*), researchers focused on the banks' reaction to external shocks and the macroeconomic effects of implementing prudential instruments. In addition, NBU researchers also worked on developing nowcasting models and short-term forecasts based on business outlook surveys and web scrapping data.

In 2018, the NBU engaged more actively in the development of a dynamic stochastic general equilibrium model (DSGE model) for Ukraine. The workshop *Application of DSGE Models in Central Banks* held by the NBU on 15–16 November 2018 provided the impetus to work on this subject.

Research cooperation was also fostered by the NBU's international research programs. Within the framework of its secondment program for researchers, the NBU held the Disinflation in a Small Open Economy open research workshop and published an article on the macroeconomic effects of implementing the capital conservation buffer in the banking sector of Ukraine.

In 2018, research results from the Visiting Scholar Program were presented and discussed at numerous seminars and conferences at the NBU, the Bank of Finland Institute for Economies in Transition (BOFIT), and at Swansea University. Research results were published in a series of working papers of the NBU and the Bank of Finland.

Aiming to encourage cooperation, and to use and develop the potential of young researchers, the NBU organized two conferences in 2018. The first one – *Integration Trends in Europe and the Impact on the Region* – was organized on 13 April 2018 jointly with Narodowy Bank Polski, with the support from the Warsaw School of Economics, the Banking University, and Ivan Franko Lviv National University. The second conference *Banking Sector and Monetary Policy: Future Prospects* was held on 2 November 2018, in cooperation with the Kyiv School of Economics.

It has already become a tradition for the NBU to organize an annual international research conference jointly with Narodowy Bank Polski and supported by the Government of Canada and the Kyiv School of Economics. This time, the conference took place on 31 May – 1 June 2018 and was dedicated to the interaction between fiscal and monetary policies.

The conference program included four research sessions and two sections with discussions on practical approaches to political decision-making. World-renowned experts and scholars made presentations and participated in these discussions. Some 350 participants took part in the conference, coming from 114 international financial, academic, and state organizations and institutions. It is worth noting that this was the first time that a short summary of the conference presentations was published in the *Global Banking & Finance Review*, in partnership with Celicourt.

In order to attract the attention of a wider audience of Ukrainian experts and academics to the topic of the conference, the NBU held a workshop for lecturers of the best Ukrainian universities on *Practical Aspects of Forming and Implementing the Monetary Policy of the National Bank of Ukraine*.

In parallel with the conference, Ukraine Economy Week, a special event for researchers, was organized jointly with the Kyiv School of Economics and VoxUkraine on 28 May – 3 June 2018. The even included a public debate between the representatives of the NBU and the Ministry of Finance of Ukraine. Additionally, a "career breakfast" was organized for students of leading universities, where they discussed career opportunities in the following three areas – science, business, and public administration. This was also accompanied by a number of educational events.

5.3. Information Security

Pursuant to the Law of Ukraine *On the Basic Principles of Cybersecurity in Ukraine* (hereinafter referred to as the Law), the NBU is playing a key role in the national system of cybersecurity.

The NBU Cybersecurity Center was created to implement the law and ensure proper information security and cyber protection of the central bank's information systems.

The NBU Board approved the project on the *Creation of the Cybersecurity Center of the National Bank of Ukraine.* In 2018, within the framework of the project, the NBU Computer Security Incident Response Team (CSIRT-NBU) was formed as the key unit of the NBU Cybersecurity Center, and up-to-date cybersecurity hardware and software was purchased.

The Cybersecurity Center primarily aims to: organize cybersecurity in the NBU and the banking system of Ukraine; create a sector-wide platform for the implementation of the latest practices and technologies for detecting and responding to cyber incidents; and to unite the efforts of the NBU and the banking community in counteracting the current cyber threats faced by the banking system of Ukraine.

Attaining a proper level of cyber security requires an exchange of information between participants of the banking system of Ukraine, other participants of the national cybersecurity system of Ukraine, and local and international cyber protection institutions.

From February 2018, CSIRT-NBU has been providing the banking system of Ukraine with real-time notifications and information on the cyber incidents and attempted cyber attacks it detects. The unit has also developed indicators for cyber threats and prepared cybersecurity recommendations. The NBU Cybersecurity Center also exchanges information and interacts with CERT-UA and the Situational Centre for Cybersecurity in Ukraine of the Security Service of Ukraine.

In order to create the unified and trustworthy information environment that is necessary for effective interaction and communication between participants of the Ukrainian banking system, the information and analytical system of the NBU Cybersecurity Center was created and launched in test mode. This included the deployment of the CRITS (Collaborative Research Into Threats) analytical repository of malware samples and cyber-attack artifacts, and the MISP (Malware Information Sharing Platform) system for sharing cyber-threat indicators.

The NBU's information systems and CSIRT-NBU cybersecurity hardware and software, which work in an online mode, detected around a million cyber incidents and attempted cyber attacks, and analyzed around 4,000 samples of malware, with the relevant cybersecurity indicators being created.

The NBU is working to obtain accreditation for CSIRT-NBU from the international Forum of Incident Response and Security Teams (FIRST), become a member of the Financial Services Information Sharing and Analysis Center (FS-ISAC), and exchange information with other computer security incident response teams at EU banking institutions.

To set the legal framework for organizing and delivering cybersecurity and information security in the banking system of Ukraine, the NBU has developed the *Regulation on Measures to Ensure Information Security in the Banking System of Ukraine*. The regulation lays down requirements for cyber protection and information security based on the effective information security standards – in particular: DSTU ISO/IEC 27000:2015, DSTU ISO/IEC 27001:2015, DSTU ISO/IEC 27002:2015.

In order to implement the Law in terms of setting the requirements for information security and cyber protection in the area of money transfers, the NBU developed the draft of the *Regulation on Cyber Protection and Information Security in Payment Systems*, which has undergone public consultations.

5.4. Environmental Protection

The main task of the concept for the development of environmental safety is to ensure the integration of environmental policy into the strategy of social and economic reforms of the National Bank of Ukraine. Its main goal is to provide well-balanced solutions to social and environmental issues, ensuring NBU staff and the surrounding population to have the rights to proper labor conditions and to lead a healthy life in harmony with nature. The essence of the prospective development is to satisfy current needs without limiting the interests of future generations.

The NBU cares about the environment and its future state.

The NBU's up-to-date strategic priorities for sustainable development include:

- an inventory of all sources of air pollution, and paying taxes on permitted emissions of pollutants
- concluding an agreement 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
- modernizing lighting system, eliminating the need to dispose of class-1 hazardous luminescent lamps
- implementing an electronic document flow system, which has significantly reduced the amount of domestic (office) waste and stationery expenses (paper, plastic, metal scrap, mixed waste, etc.)
- arranging water supplies and sewerage under contracts with specialized organizations; 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 treatment facilities and sanitary laboratories.

The NBU is running the initiative *I Vote for Responsible Consumption*. Employees share eco-friendly stories – their waste sorting experiences, participate in the ***Let's Make Ukraine Clean*** campaign, buy coffee that is put in their own cups, or not taking unneeded plastic bags in supermarkets. An initiative to install containers for collecting and further recycling plastic bottles has been supported and is currently being developed by the working group.

Paperless Project

The project aims to update current NBU regulations that have clearly given the green light to the use of e-documents.

The Paperless project was successfully completed in late 2018. The changes concerned the processes of customer identification and verification, cash operations, servicing foreign trade, trade finance transactions, and creating customer credit histories. Today, banks are starting to conduct these and other transactions electronically.

The NBU continues to actively develop and implement paperless innovations in Ukrainian banks, creating the conditions for transitioning to an electronic document flow.

5.5. Social Responsibility

Labor Safety

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

Social Responsibility: Initiatives of the Staff

In 2018, NBU employees continued to support their mobilized colleagues and comrades serving in the area of the Joint Forces Operation, as well as injured soldiers who were receiving treatment at the Main Military Clinical Hospital in Kyiv.

The NBU also proceeded with initiatives to support orphanages, lonely elderly people, and animal shelters. The assistance was provided as corporate volunteering provided by caring employees of the NBU.

In June 2018, supported by the Labor Union Organization, the NBU team took part in the 26th charitable Chestnut Run to help the Center for Pediatric Cardiology and Cardiac Surgery of the Ministry of Health of Ukraine.

In spring and in autumn, a Donor Day was organized in cooperation with the Amosov National Institute of Cardiovascular Surgery and the Kyiv City Blood Center. Over 100 central bank employees were involved in the initiative.

The NBU adheres to the European approach to business: transparency, respect for human rights, anti-corruption policies, and charity.

Preventing corruption is not only the civil duty of every NBU employee, but also a matter of honor for them. The staff counteract any attempted and actual incidents of the unlawful acquisition of a benefit, and are obliged to report any cases of corruption, in line with the applicable legislation. The NBU Code of Conduct contains the following provisions:

- NBU employees are forbidden to give, propose, promise, receive, accept, demand, or ask for money or other benefits in order to obtain any unlawful benefit in their interests or in the interests of third parties. This applies to all employees, irrespective of their position, status, circumstances, and location.
- Employees are obliged to report any cases of corruption at the NBU in accordance with the NBU Code of Conduct, NBU regulations, and Ukrainian law.

National Bank of Ukraine

Consolidated Financial Statements

for the Year Ended 31 December 2018

STATEMENT OF MANAGEMENT'S RESPONSIBILITIES FOR THE PREPARATION AND APPROVAL OF THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2018

Management is responsible for the preparation of the consolidated financial statements that present fairly, in all material respects, the consolidated financial position of the National Bank of Ukraine (the NBU) and its subsidiary as at 31 December 2018, and the consolidated results of its operations, cash flows, and changes in equity for the year then ended, and a summary of significant accounting policies and other explanatory information in accordance with International Financial Reporting Standards (IFRSs) and the requirements of the Law of Ukraine *On Accounting and Financial Reporting in Ukraine* (*Law On Accounting and Financial Reporting*).

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

- properly selecting and applying accounting policies
- presenting information, including accounting policies, in a manner that provides relevant, reliable, comparable, and understandable information
- providing additional disclosures when compliance with the specific requirements of IFRSs is insufficient to enable users to understand the impact of particular transactions, other events, and conditions on the consolidated financial position and financial performance of the NBU and its subsidiary, and
- making an assessment of the ability of the National Bank of Ukraine and its subsidiary to continue as a going concern in the foreseeable future.

Management is also responsible for:

- designing, implementing, and maintaining an effective and sound system of internal controls, throughout the NBU and its subsidiary
- maintaining adequate accounting records that are sufficient to show and explain the transactions of the NBU and its subsidiary and disclose with reasonable accuracy at any time the consolidated financial position of the NBU and its subsidiary, and which enable them to ensure that the consolidated financial statements of the NBU and its subsidiary comply with IFRSs
- maintaining statutory accounting records in compliance with the legislation of Ukraine
- taking such steps as are reasonably available to them to safeguard the assets of the NBU and its subsidiary;
- detecting and preventing fraud and other irregularities, and
- compliance with other requirements of the current legislation in the field of audit, accounting, and corporate governance, which are stipulated to the management of the NBU and its subsidiary, and ensuring compliance with these requirements by the higher authorities of the NBU and its subsidiary.

The consolidated financial statements of the NBU for the year ended 31 December 2018 was approved and authorized for issue by management of the NBU on 16 April 2019.

On behalf of the Board of the National Bank of Ukraine:

Governor	Yakiv SMOLII
Chief Accountant – Director of Accounting Department	Bohdan LUKASEVYCH

PJSC "Deloitte & Touche USC"
48, 50A, Zhylyanska St.
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Ukraine

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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, which comprise the consolidated statement of financial position as at 31 December 2018, and the consolidated statement of comprehensive income, 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 and its subsidiary as at 31 December 2018, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") and the requirements of the Law of Ukraine "On accounting and financial reporting in Ukraine" ("Law on accounting and financial reporting").

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 and its subsidiary in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (the "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

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.

Why the matter was determined to be a key audit matter	How the matter was addressed in the audit
Measurement of interest income on securities the payments of which are linked to inflation index Debt securities measured at amortized cost include domestic government loan bonds the payments of which are linked to inflation index (the "indexed DGLBs"). Interest income on the indexed DGLBs for the year ended 31 December 2018 amounted to UAH 19,730 million, or 41% of total interest income for the year (Note 22 to the consolidated financial statements). The National bank of Ukraine (the "NBU") recognizes interest income on debt securities in accordance with IFRS 9 Financial Instruments ("IFRS 9") by using the effective interest rate method, as disclosed in Note 2 to these consolidated financial statements. Selecting and applying a respective methodology for calculating the effective interest rate and inputs is a matter of management's professional judgment, thus, we consider the measurement of interest income on the indexed DGLBs as a key audit matter.	We have obtained understanding of the process and controls in respect of calculating and recognizing interest income on the indexed DGLBs. We have checked the accounting policies used by the National Bank of Ukraine to accounting for the indexed DGLBs and measuring interest income on them for compliance with IFRS 9 requirements. We have also analyzed whether the selected accounting policies result in fair presentation of operations with indexed DGLBs. We have recalculated interest income for the year ended 31 December 2018 on the indexed DGLBs, checked the accuracy and completeness of the inputs used in calculating interest income, such as the effective interest rate that is based on actual inflation indexes for a respective period published in official sources and carrying amounts of the securities in respect of which relevant interest income is accrued.
Allowances for expected credit losses on domestic securities measured at amortized cost As discussed in Note 8 to these consolidated financial statements, domestic securities measured at amortized cost include UAH-denominated DGLBs held by the NBU to maturity in the amount of UAH 360,744 million and UAH 371,064 million as at 31 December 2018 and 01 January 2018, respectively. To assess allowances for expected credit losses on the domestic securities measured at amortized cost, the NBU's management is required to make a number of judgments and assumptions, including: • Timely identification of exposures with significant increase in credit risk (stage 2) and credit impaired exposures (stage 3); • Assumptions used in the expected credit loss model such as probability of default, loss given default and exposure at default (Note 3). We consider this issue to be a key audit matter because of substantial balances of domestic securities measured at amortized cost and judgment used by management regarding the assessment of allowances for expected credit losses on them.	We have reviewed the methodology of the National Bank of Ukraine regarding the assessment of expected credit losses on domestic securities and criteria used for stage allocation and evaluated this methodology for compliance with IFRS 9 requirements. We have performed an alternative assessment of the allowance for expected credit losses on domestic securities measured at amortized cost, in particular, we have: • Analyzed whether there was a significant increase in credit risk as at 31 December 2018 and 01 January 2018 based on the credit ratings assigned by international rating agencies; • Recalculated allowance for expected credit losses on domestic securities measured at amortized cost using the observable data published by international rating agencies in relation to probability of default and loss given default data with consideration of various scenarios based on historical experience and future expectations; • Checked the accuracy and completeness of the inputs used in calculation of allowance for expected credit losses.

Other Information

Management is responsible for the other information. The other information comprises the Management report, which 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 Annual report, which is expected to be made available to us after that date.

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 identified above 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 on the other information that we obtained prior to the date of this auditor's report, 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 are required to communicate the matter to those charged with governance.

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 Law on accounting and financial reporting, 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 and its subsidiary to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless those charged with governance either intends to liquidate the National Bank of Ukraine and its subsidiary or to cease operations, or have no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the National Bank of Ukraine and its subsidiary 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 internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the National Bank of Ukraine and its subsidiary ability 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 and its subsidiary 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 consolidated financial information of the entities or business activities within 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 audit of the National Bank of Ukraine and its subsidiary. We remain solely responsible for our audit opinion.

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period, which constitute the key audit matters included herein. We describe these matters in our auditor's report, except for the cases when a law or regulation prohibits a public disclosure of a specific matter or, in extremely adverse circumstances, we determine that such an matter should not be addressed in our report, as negative consequences from such a disclosure may predictably outweigh its usefulness for interests of the public.

Report on Other Legal Requirements

We have been appointed as auditor of the National Bank of Ukraine by those charged with governance, the Council of the National Bank of Ukraine, on 30 October 2018. In view of the previous renewals and reappointments, we conducted audit from 01 October 2014 to the date of this report.

We confirm that the audit opinion is consistent with the additional report to the audit committee or equivalent.

We confirm that the prohibited non-audited services referred to ISA or requirements of Article 6, paragraph 4 of Law of Ukraine «On Audit of Financial Statements and Audit Activities» were not provided and that the audit engagement partner and audit firm remains independent of the National Bank of Ukraine and its subsidiary in conducting the audit.

Basic information about audit firm

Name: PJSC "Deloitte & Touche Ukrainian Services Company".

Address of registration and location of audit firm: 48, 50a Zhylianska Str., Kyiv, 01033, Ukraine.

"Private Joint Stock Company "Deloitte & Touche Ukrainian Services Company" was enrolled to Sections of "Audit Entities", "Audit Entities and Auditors That Have the Right to Conduct Statutory Audits of Financial Statements", and "Audit Entities and Auditors That Have the Right to Conduct Statutory Audits of Financial Statements of Public Interest Entities" of the Register of Auditors and Auditing Entities of the Audit Chamber of Ukraine under #1973."

PJSC "Deloitte & Touche USC"

Key Audit Partner Natalia Samoilova

Certificate of Banks' Auditor # 0202
issued by the Audit Chamber of Ukraine
on 24 December 2014, valid until 24 December 2019

PJSC "Deloitte & Touche USC"
48, 50a Zhylianska Str., Kyiv, 01033, Ukraine

Україна * м. Київ * Приватне акціонерне товариство "Делойт енд Туш Юкрейніан Сервісез Компані" Ідентифікаційний код 25642478

Certified Auditor Yevhen Zanoza

Certificate of Banks' Auditor # 0018
issued by the Audit Chamber of Ukraine
on 29 October 2009, valid until 1 January 2020

PJSC "Deloitte & Touche USC"
48, 50a Zhylianska Str., Kyiv, 01033, Ukraine

16 April 2019

Consolidated statement of financial position

	Notes	2018	2017
			(in UAH millions)
Assets			
Funds and deposits in foreign currency and investment metals	5	**116,681**	25,168
Foreign securities	6	**432,991**	414,455
SDR holdings	7	**100**	60,860
Monetary gold		**27,752**	28,404
Domestic securities	8	**361,436**	372,697
Loans to banks and other borrowers	9	**22,145**	32,417
Internal state debt		**1,834**	1,926
IMF quota contributions	10	**77,472**	80,415
Property and equipment and intangible assets	11	**4,780**	5,421
Other assets	12	**4,188**	5,238
Total assets		**1,049,379**	1,027,001
Liabilities			
Banknotes and coins in circulation		**400,119**	361,544
Accounts of banks	13	**38,509**	39,994
Accounts of government and other institutions	14	**47,727**	56,124
Liabilities on profit distribution to the State Budget of Ukraine	19	**64,898**	44,614
Certificates of deposit issued by the National Bank of Ukraine	15	**61,867**	67,024
Borrowings received	16	**2,769**	2,807
Liabilities to the IMF except for quota contributions	17	**217,300**	206,245
Liabilities to the IMF in respect of quota contributions	17	**77,462**	80,411
Other liabilities	18	**1,221**	3,308
Total liabilities		**911,872**	862,071
Equity			
Statutory capital	20	**100**	100
General and other reserves	20	**56,091**	53,053
Revaluation reserves for assets and liabilities	20	**81,274**	111,740
Total equity		**137,465**	164,893
Noncontrolling interest		**42**	37
Total equity		**137,507**	164,930
Total equity and liabilities		**1,049,379**	1,027,001

Approved and authorized for issue on behalf of the Board of the National Bank of Ukraine on 16 April 2019.

Governor Yakiv SMOLII

Chief Accountant – Director of Accounting Department Bohdan LUKASEVYCH

The accompanying notes on pages from 11 to 68 are an integral part of these consolidated financial statements.

Consolidated statement of comprehensive income

	Notes	2018	2017
			(in UAH millions)
Interest income	22	**47,901**	53,717
Interest expense	22	**(13,510)**	(11,631)
Net interest income, before impairment recovery		**34,391**	42,086
Net impairment recovery on financial assets		**498**	3,151
Net interest income, after impairment recovery		**34,889**	45,237
Fee and commission income		**354**	429
Fee and commission expense		**(1,222)**	(41)
Net fee and commission income/(expense)		**(868)**	388
Gains or losses on operations with financial assets and liabilities in foreign currency and monetary gold		**(2,223)**	14,344
Gains or losses on operations with debt securities measured at fair value		**6,668**	2,657
Gains or losses on operations with financial instruments, other than debt securities measured at fair value		**41**	2,035
Other income	23	**1,019**	1,252
Total net income		**39,526**	65,913
Staff costs	24	**(1,459)**	(1,367)
Costs related to production of banknotes, coins, souvenirs, and other products		**(1,284)**	(961)
Administrative and other expenses	25	**(1,037)**	(1,259)
Recovery of/(Charging) provisions for contingent liabilities	18	**2,082**	(31)
Net increase in provisions for other assets		**(4)**	(2)
Profit before income tax		**37,824**	62,293
Income tax expense of subsidiary		**(9)**	(2)
Profit for the year		**37,815**	62,291
Other comprehensive income not to be reclassified subsequently to profit or loss:			
Revaluation of investment metals		**(99)**	(212)
Other comprehensive income for the year		**(99)**	(212)
Total comprehensive income for the year		**37,716**	62,079
Profit for the year attributable to:			
National Bank of Ukraine		**37,810**	62,290
Noncontrolling interest		**5**	1
		37,815	62,291
Comprehensive income attributable to:			
National Bank of Ukraine		**37,711**	62,078
Noncontrolling interest		**5**	1
		37,716	62,079

Approved and authorized for issue on behalf of the Board of the National Bank of Ukraine on 16 April 2019.

Governor Yakiv SMOLII

Chief Accountant – Director of Accounting Department Bohdan LUKASEVYCH

Director of Financial Controlling Department Oleh STRYNZHA

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Consolidated statement of cash flows (direct method)

	Notes	2018	2017
			(in UAH millions)
Operating activities			
Interest received		**44,406**	53,346
Fees and commission received		**354**	566
Other operating income		**1,070**	2,905
Other non-operating income		**25**	87
Interest paid		**(17,345)**	(11,200)
Fees and commission paid		**(1,222)**	(41)
Other operating expense		**(3,116)**	(2,736)
Other non-operating expense		**(358)**	(504)
Taxes, duties, and charges paid		**(320)**	(364)
Transfers to the State budget of Ukraine	19	**(44,614)**	(44,379)
Decrease in loans to banks and other borrowers		**11,897**	8,784
Internal state debt repaid		**132**	132
Decrease in accounts of banks on demand		**(1,506)**	(3,569)
(Decrease)/ increase in accounts of government and other institutions		**(6,171)**	4,861
Decrease in other assets		**1,144**	465
Increase in other liabilities		**345**	47
Other cash flows		**(678)**	(3,032)
Net cash (outflows to)/inflows from operating activities		**(15,957)**	5,368
Investing activities			
Decrease/(increase) in term deposits placed		**1,434**	68
Net increase in foreign securities		**(52,738)**	(89,764)
Purchase of monetary gold		**(29)**	(78)
Purchase of domestic securities		–	(3,949)
Repayment and sale of domestic securities		**13,422**	24,640
Investments in subsidiaries		–	(54)
Acquisition of property and equipment and intangible assets		**(124)**	(13)
Sale of property and equipment and intangible assets		**2**	–
Net cash outflows to investing activities		**(38,033)**	(69,150)
Issue of banknotes and coins in circulation		**38,575**	20,484
Proceeds from the funds received under the IMF's loans		**38,309**	26,204
Repayment of liabilities to the IMF		**(19,989)**	(8,194)
Term deposits placed/(attracted)		**9**	(797)
Certificates of deposit issued by the National Bank of Ukraine		**(5,076)**	(1,022)
Other borrowings received		–	2,712
Net cash inflows from financing activities		**51,828**	39,387
Effect of changes in exchange rates on cash and cash equivalents		**6,433**	13,923
Net increase/(decrease) in cash and cash equivalents		**4,271**	(10,472)
Cash and cash equivalents at the beginning of the reporting year		**134,970**	145,442
Cash and cash equivalents at the end of the reporting year	21	**139,241**	134,970

Cash flows for the year 2017 were recalculated using direct method (please see Note 2).

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Governor Yakiv SMOLII

Chief Accountant – Director of Accounting Department Bohdan LUKASEVYCH

The accompanying notes on pages from 11 to 68 are an integral part of these consolidated financial statements.

Consolidated statement of changes in equity

	Notes	Statutory capital	General and other reserves	Revaluation reserve for assets and liabilities	Total equity attributable to the NBU	Non-controlling interest	Total equity
							(in UAH millions)
Balance as at 1 January 2017		**100**	**54,255**	**93,265**	**147,620**	**36**	**147,656**
Total comprehensive income for 2017		–	62,290	(212)	62,078	1	**62,079**
Gain or loss on transfer of assets	11	–	(191)	–	(191)	–	**(191)**
Realized gain/(loss) on investment metals disposed	19	–	239	(239)	–	–	**–**
Realized gain/(loss) on revaluation of securities disposed and derivatives	19	–	398	(398)	–	–	**–**
Allocation of unrealized gain/(loss) on revaluation of securities to revaluation reserve	19	–	(412)	412	–	–	**–**
Allocation of unrealized gain/(loss) on operations with derivatives to revaluation reserve	19	–	(286)	286	–	–	**–**
Compensation of unrealized gain/(loss) on revaluation of financial assets and liabilities in foreign currency and monetary gold at the cost of revaluation reserve	19	–	166	(166)	–	–	**–**
Allocation of unrealized gain/(loss) on revaluation of assets and liabilities in foreign currency and monetary gold to revaluation reserve	19	–	(18,792)	18,792	–	–	**–**
Liability of the National Bank of Ukraine on profit distribution to the State Budget of Ukraine for 2017	19	–	(44,614)	–	(44,614)	–	**(44,614)**
Balance as at 31 December 2017		**100**	**53,053**	**111,740**	**164,893**	**37**	**164,930**
Impact of change in accounting policy on determination of unrealized and realized gain/(loss) for foreign currencies, monetary gold and metals	19	–	22,011	(22,011)	–	–	**–**
Effect of transition to IFRS 9		–	22	(31)	(9)	–	**(9)**
Balance as at 1 January 2018 as restated		**100**	**75,086**	**89,698**	**164,884**	**37**	**164,921**
Total comprehensive income for 2018		–	37,810	(99)	37,711	5	**37,716**
Gain or loss on transfer of assets	11	–	(232)	–	(232)	–	**(232)**
Realized gain/(loss) on investment metals disposed	19	–	181	(181)	–	–	**–**
Realized gain/(loss) on revaluation of securities disposed and derivatives	19	–	530	(530)	–	–	**–**
Allocation of unrealized gain/(loss) on revaluation of securities to revaluation reserve	19	–	(1,617)	1,617	–	–	**–**
Allocation of unrealized gain/(loss) on operations with derivatives to revaluation reserve	19	–	(40)	40	–	–	**–**
Compensation of unrealized gain/(loss) on revaluation of financial assets and liabilities in foreign currency and monetary gold at the cost of revaluation reserve	19	–	9,271	(9,271)	–	–	**–**
Liability of the National Bank of Ukraine on profit distribution to the State Budget of Ukraine for 2018	19	–	(64,898)	–	(64,898)	–	**(64,898)**
Balance as at 31 December 2018		**100**	**56,091**	**81,274**	**137,465**	**42**	**137,507**

Approved and authorized for issue on behalf of the Board of the National Bank of Ukraine on 16 April 2019.

Governor — Yakiv SMOLII

Chief Accountant – Director of Accounting Department — Bohdan LUKASEVYCH

The accompanying notes on pages from 11 to 68 are an integral part of these consolidated financial statements.

Notes to the Consolidated Financial Statements

1 Principal Activities

The National Bank of Ukraine (the NBU) is the central bank of Ukraine and operates in accordance with the Constitution of Ukraine, the Law of Ukraine *On the National Bank of Ukraine*, and other regulations of Ukraine. In accordance with the Ukrainian legislation, the primary function of the NBU is to ensure stability of the national currency of Ukraine. In fulfilling its primary function, the NBU shall proceed from priorities in achieving and maintaining price stability in the country. The NBU shall facilitate stability of the banking system and sustainability of economic growth, as well as support the economic policies of the Cabinet of Ministers of Ukraine provided that they do not prevent the NBU from carrying out its primary function of maintaining price stability.

The NBU does not aim to earn profits. The financial results of the NBU's activities, as well as the structure of its assets, liabilities, and equity are defined by the functions of the NBU as a special central government authority.

In accordance with the Law of Ukraine *On the National Bank of Ukraine*, the main functions of the NBU are as follows:

determine and carry out monetary policy in accordance with the Monetary Policy Guidelines developed by the NBU Council

in its capacity as a monopoly, issue the national currency of Ukraine and arrange for its circulation

ensure accumulation and maintenance of foreign (gold and foreign currency) reserves (hereinafter referred to as "international reserves") and perform operations with international reserves and investment metals

be a lender of last resort to banks and organize a system of refinancing

exercise banking regulation and supervision on an individual and consolidated basis

represent Ukraine in relationships with other central banks, international banks, and other credit institutions where cooperation is maintained among central banks;

exercise, in accordance with the authorities established by a specific law, currency regulation, determine a procedure for conducting foreign currency operations, arrange and monitor currency activities of the banks and other financial institutions that have obtained licenses from the NBU on conducting currency operations

arrange and effect cash collection and transportation of currency valuables, grant licenses, in accordance with the procedure established by the NBU, to legal entities on providing cash collection services to banks, cancel, extend, or revoke them

determine specific aspects of the Ukrainian banking system functioning in the event a martial law or special period is imposed, perform mobilization training within the NBU's system

exercise other functions in financial and credit areas within the competence defined by the Law of Ukraine *On the National Bank of Ukraine*.

According to the Law of Ukraine *On the National Bank of Ukraine*, the NBU grants loans to banks to support their liquidity, purchases and sells securities, currency valuables, and investment metals in the open market, sells commemorative coins made of precious and nonprecious metals in domestic and foreign markets, performs operations on servicing the state debt in respect of placement of government securities, their redemption, and payment of interest, maintains accounts of the State Treasury of Ukraine and accounts of international organizations, and conducts other operations required to perform its functions. The NBU also performs the functions of a depository for government securities of Ukraine.

The statutory capital of the NBU is owned by the State.

In accordance with the Constitution of Ukraine, the main task of the NBU's Council is to develop Monetary Policy Guidelines and exercise control over implementation of monetary policies. In addition, in accordance with the Law of Ukraine *On the National Bank of Ukraine*, the NBU Council shall approve, on an annual basis, the NBU's budget of income and expenditures for the next year, take decisions on allocation of distributable profits to increase the NBU's statutory capital and create provisions to finance the investments aimed at supporting the NBU's activities, approve annual financial statements of the NBU, report on fulfilment of the NBU's budget of income and expenditures and distribution of profit for the reporting year, and approve decisions of the NBU Board on the NBU's participation in international financial organizations, as well as perform other functions according to its authority as defined by the Ukrainian legislation. The NBU Council establishes the Audit Committee with the purpose of assessing reliability and efficiency of internal controls within the NBU, as well as completeness and accuracy of the annual financial statements of the NBU.

As at 31 December 2018 and 2017, included in the NBU's structure were Central Administrative Office and a standalone unit (the Banknote Printing and Minting Works) which supported their activities solely within the NBU's tasks and functions in accordance with the Law of Ukraine *On the National Bank of Ukraine*.

The NBU's subsidiary is SETTLEMENT CENTER FOR SERVICING AGREEMENTS IN FINANCIAL MARKETS PJSC (the Settlement Center). In July 2017, according to the Laws of Ukraine *On Depository System of Ukraine* and *On Simplifying Bank Reorganization and Capitalization Procedures*, the NBU purchased 53,600 shares in the Settlement Center through redemption of ordinary shares in the Settlement Center. As a result, the NBU's shareholding in the statutory capital of the Settlement Center amounted to 83.55% as at 31 December 2018 (31 December 2017: 83.55%).

As at 31 December 2018 and 2017, the statutory capital of the Settlement Center amounted to UAH 206.7 million and comprised ordinary registered shares with a par value of UAH 1,000 each.

The exclusive competency of the Settlement Center includes making settlements under transactions with securities and other financial instruments exercised on stock exchanges and over-the-counter, provided settlements are effected using the 'delivery versus payment' principle. The Settlement Center opens and maintains cash accounts for stock exchange participants. In addition, it ensures the payment of returns on securities and repayment of the nominal value when securities are redeemed and an issuer performs other corporate transactions, including the securities placed and circulating outside Ukraine.

The NBU is a founder of the Corporate Nonstate Pension Fund of the NBU (the CNPF). The NBU acts as an administrator and custodian of the CNPF.

The NBU has analyzed the availability of control under IFRS 10. Consolidated Financial Statements in respect of the CNPF. The NBU is a founder, but it is neither exposed, nor has rights, to variable returns of its operations. According to IFRS 10, the NBU has no control over the CNPF and, correspondingly, the CNPF has not been consolidated in these consolidated financial statements.

As at 31 December 2018 and 2017, the NBU's investments in associates were represented by the German-Ukrainian Fund and National Depository of Ukraine, Public Joint Stock Company.

The German-Ukrainian Fund (the GUF) was established by the Cabinet of Ministers of Ukraine as represented by the Ministry of Finance, the NBU, and Kreditanstalt fur Wiederaufbau (the KfW) (registered in Germany). The area of core activities of the GUF is improvement of competitiveness of Ukrainian small and medium entities by means of their financing through appointed Ukrainian banks using the GUF funds. According to the Charter, the GUF does not have an objective of generating profits. Profits of the GUF are allocated to increase the lending pool for small and medium entities. As at 31 December 2018, the NBU's share in the GUF's statutory capital amounted to 31.25% (31 December 2017: 31.25%).

The NBU, the National Commission for Securities and Stock Market, and other participants of the stock market are shareholders of National Depository of Ukraine, Public Joint Stock Company (the National Depository). In accordance with the Charter, the National Depository is engaged in depository accounting, accounting for securities, and corporate transactions of issuers on securities accounts of customers.

As at 31 December 2018, the NBU owned 2,580 ordinary registered shares in the National Depository with the nominal value of UAH 10,000 each in the total amount of UAH 25.8 million (2017: 2,580 ordinary registered shares in the National Depository with the nominal value of UAH 10,000 each in the total amount of UAH 25.8 million). As at 31 December 2018, the NBU's share in the statutory capital of the National Depository was 25% (31 December 2017: 25%).

Approval of the consolidated financial statements is an authority of the NBU Council.

2 Basis of Presentation and Significant Accounting Policies

The consolidated financial statements of the NBU have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (the IASB).

These consolidated financial statements have been prepared based on the assumption that the NBU is a going concern and will continue its operation in the foreseeable future.

These consolidated financial statements have been prepared on a historical cost basis, except for financial assets classified as financial assets measured at fair value. The consolidated financial statements are presented in the national currency of Ukraine, Ukrainian hryvnia (UAH), which is the functional and presentation currency of the consolidated financial statements. These consolidated financial statements of the NBU are presented in millions of Ukrainian hryvnias (UAH millions).

Basis of Consolidation

These consolidated financial statements include the financials statements of the NBU and its subsidiary as at 31 December 2018.

Subsidiaries are the companies controlled by the NBU. The existence of control is determined when the following conditions are simultaneously met:

- existence of power over the investee
- rights to variable returns from involvement in the investee and exposure to respective risks

- ability to use its powers over the investee to make an impact on the NBU's performance.

Consolidation of subsidiaries begins when the NBU obtains control over them (commonly on the date of acquisition) and ceases when the NBU loses control over subsidiaries.

Changes in ownership interest in a subsidiary, without a loss of control, are accounted for as an equity transaction. Losses of the subsidiary are attributable to noncontrolling interest even if they result in the noncontrolling interest having a deficit balance.

If the NBU loses control over a subsidiary, it derecognizes the assets and liabilities of the subsidiary (including goodwill), the carrying amount of noncontrolling interests, recognizes the fair value of the consideration received, the fair value of any investment retained, and any surplus or deficit on the transaction in profit or loss; reclassifies the share of the NBU in the components previously recognized in other comprehensive income to profit or loss. In the event a subsidiary is disposed of via the transfer of control to the State as represented by the Cabinet of Ministers of Ukraine or other government authorities, a gain or loss on such a transaction is included in equity.

Intragroup balances, including income and expense on transactions between subsidiaries, are eliminated on consolidation. The NBU and its subsidiary use uniform accounting policies in preparing the consolidated financial statements. The financial statements of the subsidiary have been prepared for the same reporting period as the NBU's consolidated financial statements.

Investments in Associates

Associates are the entities over which the NBU has significant influence. Significant influence means the power to participate in the financial and operating policy decisions of the investee, but it does not mean control or joint control over those policies.

Investments in associates are accounted for under the equity method and recognized in other assets. Subsequent changes in the carrying value reflect the post-acquisition changes in the NBU's share in net assets of an associate. The NBU's share in the post-acquisition profits or losses of associates is recorded in the consolidated statement of comprehensive income as other income or expense. The NBU's share in other changes in the associates' equity that have occurred from the date of investments is recorded in the consolidated statements of comprehensive income and changes in equity. However, if the NBU's share in losses of an associate equals or exceeds its interest in the associate, the NBU does not recognize further losses, except where the NBU is obliged to make further payments to, or on behalf of, the associate.

Key valuation techniques

Depending on their classification, financial assets and liabilities are carried at fair value or amortized cost.

Fair value is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (or most advantageous) market at measurement date under current market conditions (i.e. an exit price) regardless of whether that price is directly observable or estimated using another valuation technique.

The market in which the NBU would normally enter into transactions to sell the asset or transfer the liability is presumed to be the principal market or, in absence of a principal market, the most advantageous market. The NBU should have access to the principal or the most advantageous market at the date of measurement. The NBU measures fair value of an asset or a liability using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

If there is a principal market for the asset or liability, the fair value represents the price in that market (regardless whether that price is directly observable, or it is estimated using another valuation technique), even if the price in a different market is potentially more advantageous at the measurement date.

Such valuation techniques as discounted cash flows and consideration of financial data of the investees are used to measure fair values of certain financial instruments for which external market pricing information is not available. Valuation techniques may require assumptions not supported by observable market data. Disclosures are made in these consolidated financial statements if changes in any such assumptions to a reasonably possible alternative may result in significantly different amounts of profit, income, expense, total assets, or total liabilities.

The NBU uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair values, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the consolidated financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement taken as a whole:

- Level 1 − quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 − valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable
- Level 3 − valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

Transaction costs are incremental costs that are directly attributable to the acquisition, issue, or disposal of a financial asset or financial liability. The incremental cost is one that would not have been incurred if the transaction had not taken place. Transaction costs do not include debt premiums or discounts, financing costs or internal administrative or storage costs.

Amortized cost is the amount at which the financial asset or liability was recognized at initial recognition, less any principal repayments, plus or minus the cumulative amortization using the effective interest rate method of any difference between that initial amount and the maturity amount, and for financial assets, less any write-down for the impairment losses incurred.

The effective interest rate method is a method of calculating amortized cost of financial asset or financial liability and allocating interest income or interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts (excluding future financial assets related losses) through the expected life of the financial instrument or a shorter period, if appropriate, to the net carrying amount of the financial asset or financial liability.

The effective interest rate adjusted for the credit risk is the rate at which estimated future cash payments or proceeds are exactly discounted over the expected life of a financial asset to the amortized cost of the initially impaired financial assets.

Transactions in Foreign Currency and Monetary Gold

Monetary assets and liabilities denominated in foreign currency and monetary gold are initially recognized at the official exchange rates of UAH against foreign currencies (gold) at the date of settlement – the date of initial recognition of assets and liabilities. Subsequently, they are revalued after each change in the official exchange rate[†].

Monetary assets and liabilities in foreign currency and monetary gold are carried in the consolidated financial statements at the official exchange rates of UAH against foreign currencies (gold) set by the NBU at the date of the consolidated statement of financial position.

Monetary gold consists of the stocks of gold bars of the international standard and coins of not lower than 995 standard owned by the NBU and forming a part of international reserves. Transactions in monetary gold may be performed only among monetary authorities of different countries or among those authorities and international monetary institutions.

Gold owned by the NBU but not forming its reserve assets does not belong to monetary gold.

Monetary gold is recorded in physical weight in troy ounces and is measured in UAH at the official exchange rate of the NBU. The official exchange rate is calculated based on the information on gold prices as determined (fixed) by participants of the London Bullion Market Association in USD translated into UAH at the NBU's official UAH/USD exchange rate.

Interest-bearing placements in gold with foreign banks are included in foreign currency funds and deposits and recorded in the consolidated financial statements at the official exchange rate of UAH against foreign currencies as at the date of the consolidated statement of financial position.

Major official exchange rates of UAH against foreign currencies (gold) used for translating the monetary items of the consolidated statement of financial position and monetary gold were as follows:

	31 December 2018 (in UAH)	31 December 2017 (in UAH)
USD 1	**27.688264**	28.067223
SDR 1	**38.508604**	39.971493
EUR 1	**31.714138**	33.495424
1 troy ounce of gold	**35,364.835**	36,234.785

Gains or losses on revaluation of monetary assets and liabilities in foreign currency and monetary gold, as well as gold placed with foreign banks, due to changes in the official exchange rates of UAH against foreign currencies and gold are recognized as profit or loss in the consolidated statement of comprehensive income in the period in which they arise.

* As at 31 December 2018, the official exchange rate of UAH against USD was set with reference to all arrangements on USD purchases or sales on "tod", "tom", and "spot" terms at the time of establishment entered into by banks in the interbank foreign exchange market of Ukraine with other banks and the NBU the information on which had been transferred to the National Bank of Ukraine by trade and information systems via relevant data exchange channels (31 December 2017: the official exchange rate of UAH against USD was set at the exchange rate determined as average weighted rate of purchases and sales on "tod", "tom", and "spot" terms at the time of establishment under all arrangements entered into by market participants, as well as the market participants and the NBU that had been established based on the data of the system of deal confirmation in the interbank foreign exchange market of Ukraine at the National Bank of Ukraine). As at 31 December 2018, the official exchange rate of UAH against other currencies was established based on the information about the official exchange rate of UAH against USD and the daily reference exchange rates of currencies against EUR of the European Central Bank (31 December 2017: the official exchange rate of UAH against other currencies was established based on the information about the official exchange rates of UAH against USD and the daily fixing exchange rates of currencies against EUR of the European Central Bank). As at 31 December 2018 and 2017, the official exchange rate of UAH against USD was set on each business day.

Operations with the International Monetary Fund
The NBU acts as a depository and fiscal agent of Ukraine (in respect of the funds received by the NBU) in the relationships of Ukraine with the International Monetary Fund (the IMF). All claims of Ukraine on and liabilities to the IMF in respect of the funds received by the NBU are recorded in the consolidated financial statements of the NBU. The IMF's asset balances include holdings of Special Drawing Rights SDR) and the IMF quota contributions. Liabilities to the IMF include the securities issued to the IMF by the NBU in settlement of quota and as a fiscal agent in respect of its borrowings and balances on the IMF's 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 UAH 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 UAH/USD exchange rate.

NBU accounts SDR holdings and IMF quota contributions at amortized cost.

Interest received in respect of SDR holdings is recognized as interest income, and charges paid in respect of the use of the IMF's funds are recognized as interest and fee and commission expense, as appropriate, in the consolidated statement of comprehensive income. Nonreimbursable fees under arrangements of SDR purchases are recorded as fee and commission expense. Expenses related to operations with the IMF are amortized using the effective interest rate method and recorded as interest expense.

Transactions with Financial Instruments
The NBU classifies all financial instruments into the categories that are designated as at fair value through profit or loss and amortized cost depending on the models determined to manage financial assets and cash flow characteristics. The NBU does not classify any assets into the category designated as at fair value through profit or loss in order to remove or reduce significantly an accounting mismatch.

Financial assets of the NBU are classified as follows:

Funds and Deposits in Foreign Currency Measured at Amortized Cost
Funds and deposits in foreign currency are recorded when the NBU advances foreign currency funds to counterparty banks within a business model for managing financial assets whose 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 Measured at Amortized Cost
This category includes the securities in respect of which both of the following conditions are met:

- Securities are held within the business model used for managing the NBU's financial assets under which securities are held to collect contractual cash flows.
- Contractual terms give rise to cash flows on specified dates that are solely payments of securities' principal and interest on the principal amount outstanding.

Such securities include domestic government loan bonds (DGLBs) with fixed coupons and DGLBs with coupon calculated as inflation index for the last 12 month plus determined margin (indexed DGLBs). The NBU accounts indexed DGLBs as instrument with floating interest rate and calculates interest income using effective interest rate. Herewith effective interest rate determined based on actual inflation rate for the reporting period and not based on forecasts.

Debt Securities Measured at Fair Value through Profit or Loss
The NBU manages a group of such financial instruments in accordance with a documented business model which is used for managing the NBU's financial assets and which relates to other types of models for managing financial assets than a business model for managing financial assets whose objective is both to collect cash flows in compliance with 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 due to the received results of cash flow characteristics analysis in respect of the financial assets which do not envisage for cash flows that are 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 advantageous markets.

Change in Classification
Securities may be reclassified to securities measured at amortized cost, at fair value through other comprehensive income. Classification and measurement requirements related to the new category applied prospectively from the first day of the first reporting period after the changes to the model of financial asset managing led to reclassification.

Loans to Banks and Other Borrowers Measured at Amortized Cost
Loans to banks and other borrowers are recorded when the NBU lends money to counterparty banks or other borrowers within the business model 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. These loans do not have embedded derivatives, are not quoted in the market, and are due on fixed or determinable dates.

Internal State Debt
Internal state debt includes loans granted to the Government of Ukraine. Internal state debt is accounted under the business model to collect contractual cash flows and the contractual cash flows represent solely the payments to repay the principal amount and interest. The internal state debt is initially recognized at fair value and subsequently measured at amortized cost.

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 values are positive and as liabilities if the fair values are negative.

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 ownership right 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

foreign currency denominated funds and deposits, debt securities at amortized cost, loans to banks and other borrowers, and all financial liabilities are initially recorded at fair value, plus transaction related costs.

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 initial recognition differs from the transaction price, it accounts for that instrument at that date as follows:

at the measurement value, 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 at initial recognition and the transaction price as a gain or loss

in all other cases, at the measurement value, adjusted to defer the difference between the fair value at initial recognition and the transaction price. After initial recognition, the NBU recognizes that deferred difference as a gain 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. Gains or losses from changes in fair value are recognized in profit or loss of the consolidated statement of comprehensive income in the period in which they arise

Foreign currency denominated funds and deposits, debt securities measured at amortized cost, loans to banks and other borrowers, as well as the internal state debt and other financial liabilities, other than derivatives, are measured at amortized cost using the effective interest rate method.

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

An allowance for expected credit losses is created by expensing a relevant amount.

The NBU recognizes allowances for expected credit losses on financial assets (deposits granted, loans measured at amortized cost, debt securities at amortized cost, accounts receivable) and allowances for expected credit losses on off-balance sheet commitments when the NBU has irrevocable lending commitments.

An allowance for expected credit losses is measured in the amount of credit losses over the expected life of the financial instrument if the credit risk on that financial instrument has increased significantly from the date of its initial recognition. Otherwise, the allowance for expected credit losses is measured in the amount equal to 12-month expected credit losses. The NBU's policies in respect of determining credit risk are disclosed in Note 28.

The NBU includes its financial instruments to one of the following impairment stages:

Impairment Stage One (Stage 1) – financial instruments with a low credit risk at the reporting date or no significant deterioration of credit risk since initial recognition;

Impairment Stage Two (Stage 2) – financial instruments with a significant deterioration of credit risk at the reporting since initial recognition, but no objective evidence of credit impairment;

Impairment Stage Three (Stage 3) – financial instruments with the objective evidence of credit impairment at the reporting date.

At the date of initial recognition, all 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:

- 12-month ECLs – for the financial assets at Impairment Stage One
- full lifetime ECLs – for the financial assets at Impairment Stages Two or Three, except for purchased or originated credit-impaired financial assets.

For purchased or originated credit-impaired financial assets, allowances for expected credit losses are created in the amount of difference between the amount of expected credit losses for the life of a financial instrument determined at the reporting date and the amount of expected credit losses for the life of a financial instrument determined at the date of initial recognition of the financial asset.

Loss allowance with any changes is recognized in profit or loss. A favorable change for such assets creates an impairment gain.

Allowances for financial assets are estimated and recorded in the currency in which relevant financial assets are denominated.

Provisioning and release of allowances for expected credit losses are performed pursuant to decisions of the NBU's Board at least on a monthly basis as at the end of the last business day of the month.

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.

The main factors that used to determine the significant increase in credit risk are the following:

- the period of violation of the terms of the loan agreement for servicing the debt (interest and/or principal) is from two to seven calendar days
- adoption by the NBU Board of the decision on assigning the borrower to the category of insolvent
- application by the NBU to the borrower the enhanced oversight regime, including thorough monitoring or control of the borrower, or direct intervention in the borrower's activities
- the actual reduction of the borrower's internal credit rating below a certain level.

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 a concession that the lender would not otherwise consider (such as a change in interest rate or extension of payment terms) for economic or legal reasons relating to the borrower's or issuer's financial difficulty

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

The NBU estimates its impairment losses on an individual and collective bases.

An estimation on an individual basis is performed for the financial assets that are individually significant and in respect of which there are data on the occurrence of default.

An estimation on a collective basis is performed for the financial instruments that meet the established criteria.

Financial instruments are grouped based on common characteristics of credit risk, which is indicative of the borrower's ability to make payments for debt servicing in accordance with contractual terms.

In particular, the following characteristics are common characteristics of credit risk, but not exclusively:

- a type of a financial instrument
- an internal credit rating of the borrower
- a type of an entity (systemically important banks, state-owned banks, banks of foreign banking groups, banks with private capital, other institutions, individuals)
- a type of collateral
- a ratio of the collateral value to the financial asset value, if the ratio affects the likelihood of a risk of default remaining maturity.

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 recorded in gain or loss in the consolidated statement of comprehensive income.

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 recovery.

Revision (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, with the de-recognition gain or loss recognized in profit or loss in the consolidated statement of comprehensive income.

If the change in terms and conditions is not significant, then the gross carrying values 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 value of the financial asset at the date of the terms' revision and is recognized as gains/losses on revision (modification) of financial assets' terms and conditions in the consolidated statement of comprehensive income.

Repo Transactions

Funds paid under the agreements for purchase and sale of securities with a subsequent repurchase obligation (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.

Property and Equipment

Property and equipment items are carried at historical cost, less accumulated depreciation and impairment loss.

Historical cost of acquired property and equipment items includes the costs incurred to acquire and bring them to use.

Costs of enhancement of any item of property and equipment which increases the expected economic benefits embodied in this item of property and equipment increase the asset's historical cost. Costs on minor repairs and maintenance are expensed when incurred. Costs of replacing major parts or components of property and equipment items are capitalized and the residual value of the replaced part is charged to expenses in the consolidated statement of comprehensive income of the reporting period.

If impaired, property and equipment items are written down to the higher of their recoverable value and fair value, less costs to sell. A decrease in the carrying amount is recognized in profit or loss in the consolidated statement of comprehensive income. An impairment loss recognized for an asset in prior years is reversed if there has been a change in the estimates used to determine the asset's recoverable value or fair value, less costs to sell.

Gains or losses on disposals determined as the difference between the proceeds and the asset's carrying amount are recognized in profit or loss of the consolidated statement of comprehensive income.

Construction in progress is carried at cost. Upon completion, assets are transferred to buildings and constructions measured at cost. Construction in progress is not depreciated until the asset is available for use.

Property and Equipment Held for Sale

The NBU recognizes its property and equipment as held for sale when the carrying amounts of assets are expected to be recovered rather through their sale than current use.

To recognize property and equipment as held for sale, the assets should be ready for their immediate sale, and such a sale should be highly probable.

The property and equipment items recognized as held for sale are carried at the lower of their carrying amounts or fair values, less costs to sell. If the carrying amounts of items at the date of recognition as held for sale exceeds their fair values, then such items are preliminary written down to their fair values.

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 operating leases
- a building owned by the NBU or managed under finance leases and rented out under one or several operating leases
- 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 (by the NBU's resolution on the 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 enhancement of investment property items that lead to increase in initially expected benefits from their use increase the historical 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.

Depreciation

Depreciation of property and equipment commences after the assets are available for use and is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives as follows:

buildings and structures	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 construction 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 were already of the age 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 physical 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 historical 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 historical cost, less amortization and impairment loss.

Investment and Other Precious Metals

Investment metals include stocks of gold, other than monetary, silver, platinum, and palladium held in the State Treasury of Ukraine. Investment metals are recorded in physical weight in troy ounces and are measured at the official exchange rates of the NBU. The official exchange rate is calculated based on the information on precious metal prices determined (fixed) by the participants of the London Bullion Market Association and participants of the London Platinum and Palladium Market and the NBU's official UAH/USD exchange rate.

The official exchange rates of UAH against investment metals at which investment metals are carried in the consolidated financial statements were as follows:

	31 December 2018 (in UAH)	31 December 2017 (in UAH)
1 troy ounce of gold	35,364.835	36,234.785
1 troy ounce of silver	416.847	469.845
1 troy ounce of platinum	21,956.793	25,793.778
1 troy ounce of palladium	34,776.460	29,610.920

Unrealized gains or losses on revaluation of investment metals due to changes in the official exchange rates of UAH against investment metals are included in other comprehensive income of the consolidated statement of comprehensive income in the period in which they arise. Realized gains or losses on revaluation of investment metals are transferred to retained earnings.

Interest-bearing placements in investment metals with foreign banks are included in funds and deposits in foreign currency and investment metals. Gains or losses on revaluation of investment metals placed with foreign banks due to changes in the official exchange rates of UAH against investment metals are recognized as other comprehensive income in the consolidated statement of comprehensive income in the period in which they arise.

Other precious metals include gold and other scrap metal and bars which are not of a recognized standard. Other precious metals are recognized as inventory and are carried at historical cost.

Investment and other precious metals are included in other assets in the consolidated statement of financial position.

Banknotes and Coins in Circulation

The amount of banknotes and coins in circulation represents the nominal value of banknotes and coins (small change, circulating, commemorative, and investment coins) that can be used as payment instruments and have been issued into circulation by the NBU after the introduction of UAH into circulation in September 1996. The banknotes and coins in circulation are recorded as liability at their nominal values when cash is issued by the NBU to banks and customers of the NBU. Cash in the national currency held in the NBU's vaults and cash offices, including transferred by the National Bank of Ukraine to authorized banks for cash handling, is not included in banknotes and coins in circulation.

Accounts of Banks

Accounts of banks are recognized when funds are advanced to the NBU by counterparty banks. These liabilities are nonderivative and are initially recognized at fair value, including transaction costs and are subsequently measured at amortized cost.

Accounts of Government and Other Institutions

Accounts of government and other institutions are nonderivative liabilities to government and other customers and are initially recognized at fair value, including transaction costs, and are subsequently measured at amortized cost.

Certificates of Deposit Issued by the NBU

Certificates of deposit issued by the NBU are initially recorded at fair value, including transaction costs, and are subsequently measured at amortized cost using the effective interest rate method. Upon redemption of certificates of deposit issued by the NBU, the difference between the consideration paid and the amortized cost is included in profit or loss in the consolidated statement of comprehensive income.

Borrowings Received

Borrowings received are recognized when the NBU receives funds from other central banks and begins using them on the payment basis. Initially, they are measured at fair value, less transaction costs, and subsequently measured at amortized cost using the effective interest rate method. When entering into bilateral borrowing agreements with other central banks, the parties are exposed to mutual irrevocable lending commitments to the other party of the arrangement. Before the respective borrowings are granted by central banks that are parties under arrangements, future irrevocable lending commitments are not recognized in the consolidated statement of financial position.

Income and Expense Recognition

Interest income and expense are recorded in the consolidated statement of comprehensive income on an accrual basis using the effective interest rate method for all debt instruments, except for debt securities at fair value through profit or loss. Interest income on debt securities at fair value through profit or loss is recognized in the consolidated statement of comprehensive income in gains or losses on operations with debt securities measured at fair value.

All other fee and commission and other income and expense items are generally recorded on an accrual basis by reference to completion of the specific transaction assessed as a relation of the actual service provided (received) to the total contractual services to be provided.

Costs related to production of banknotes, coins, souvenirs, and other products

The NBU produces the Ukrainian national currency banknotes and coins. Costs associated with the banknote and coin production (other than commemorative coins made of precious metals and investment coins) are charged to the NBU's expenses when the banknotes and coins produced are transferred by the Printing and Minting Works to the Central Vault of the NBU. Expenses for money issuance include depreciation of plant and machinery, staff costs, and other production costs.

Costs associated with the production of commemorative coins made of precious metals and investment coins are recorded as an asset in other assets line of the NBU's consolidated statement of financial position and are charged to expenses in the period when coins are sold.

Staff Costs

Payroll, payments of single contributions to mandatory state social security funds, transfers of contributions to the NBU's Corporate Nonstate Pension Fund, as well as expenses incurred on personnel training and development are recognized in the year in which the respective costs are incurred.

Corporate Nonstate Pension Fund of the NBU

The NBU has established the Corporate Nonstate Pension Fund, which represents a defined contribution plan. The NBU pays contributions to this fund on a contractual basis. The NBU has no further payment obligations once the contributions have been paid. The contributions are recognized as staff costs when they are due. Upon retirement of the NBU's employees, all benefits are paid by the Corporate Nonstate Pension Fund of the NBU.

The NBU acts as an administrator, asset manager, and custodian of the Corporate Nonstate Pension Fund of the NBU.

Costs Related to Contributions to Mandatory State Social Funds

Under the Ukrainian legislation, the NBU transfers the amount of the single contribution for mandatory state social security to the accounts of revenue and duty authorities opened at the central executive body responsible for implementing government policies in the sphere of treasury servicing of budget funds. The transfers made are expensed as incurred. The expenses on the single contribution for mandatory state social insurance are included in the consolidated statement of comprehensive income as staff costs.

Taxation

According to the Tax Code of Ukraine, the NBU makes settlements with the State Budget of Ukraine according to the Law of Ukraine *On the National Bank of Ukraine*.

The National Bank of Ukraine transfers distributable profits to the State Budget of Ukraine in accordance with the Law of Ukraine *On the National Bank of Ukraine*. The distributable profit is determined by decreasing profit by the amounts of unrealized gains for the reporting period transferred to revaluation reserves and by increasing profit by the amounts of compensation of unrealized losses on revaluation reserves and realized gains. These transfers are treated as distributions to owners and are recorded in the consolidated statement of changes in equity (Note 19).

The Law of Ukraine *On the National Bank of Ukraine* stipulates that the NBU shall make transfers to general reserves until the amount of general reserves equals to 10 percent of the NBU's monetary liabilities. Upon creating the general reserves in the amount stipulated for by the Law of Ukraine *On the National Bank of Ukraine*, the distributable profit shall be transferred to the State Budget of Ukraine in full.

Other taxes payable by the NBU are recorded within administrative and other expenses.

Revaluation Reserves for Assets and Liabilities

According to the Law of Ukraine *On the National Bank of Ukraine*, unrealized gains on revaluation of foreign currency and monetary gold due to changes in UAH against foreign currencies and monetary gold exchange rates during the reporting period, as well as unrealized gains on revaluation of securities and derivative financial instruments to their fair values, are transferred by the NBU to the revaluation reserve for assets and liabilities within equity in the consolidated statements of financial position and changes in equity.

The revaluation reserve is used to compensate for the unrealized losses on revaluation of foreign currency, monetary gold, securities, and derivative financial instruments at fair value, should they accumulate during the reporting year.

The revaluation reserve for foreign currency sold, monetary gold, securities, and derivative financial instruments is included in distributable profit in the respective reporting periods.

Provisions for Subsequent Expenses

Provisions for subsequent expenses of the NBU include the amounts (Note 18) provided to:

- pay for annual (basic, additional, and social) vacations of its employees to ensure the recovery of subsequent expenses incurred on annual (basic, additional, and social) vacations unused by employees of the NBU's institutions in the prior years and carried forward to subsequent years, with reference to payment of a single contribution for general mandatory state social insurance. The NBU determines the amount of provision as an undiscounted amount of current payments to employees payable in accordance with the service performed by employees, net of any amounts already paid.
- reimburse for the loss of cash stored in cash reserves, currency handling offices, and automated telling machines of the NBU's offices in Donetsk and Luhansk oblasts, considering the situation as a result of their temporary occupation.
- Repay under legal or constructive obligations (as a result of past events), in particular, under lawsuits, settlement of which will most probably result in an outflow of resources embodying economic benefits (a negative outcome is more expected than not), and their amount (expense) can be measured reliably. Costs on creating provisions are included in profit or loss in the consolidated statement of comprehensive income in the period when incurred.

Cash and Cash Equivalents

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

Offsetting

Financial assets and liabilities are offset and the net amount is reported in the consolidated statement of financial position only when there is a legally enforceable right to offset the recognized amounts, and there is an intention to either settle on a net basis, or to realize the asset and settle the liability simultaneously.

Application of New and Revised Standards and Interpretations

Revised IFRSs and Interpretations that became effective in 2018.

IFRS 9 *Financial Instruments*. Application of IFRS 9 had impact on accounting policies related to classification and measurement, however had no significant effect on the NBU's consolidated performance and financial position.

Application of the following IFRSs and amendments had no significant effect on the NBU's consolidated performance and financial position.

IFRS 15 *Revenue from Contracts with Customers* (and respective *Clarifications*). In May 2014, IFRS 15 was issued, which establishes a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. IFRS 15 will supersede the current revenue recognition guidance, including IAS 18 Revenue, IAS 11 Construction Contracts, and the related Interpretations.

The core principle of IFRS 15 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods and services. Specifically, the standard provides a single, principle-based five-step model to be applied to all contracts with customers:

- Identify the contract with the customer.
- Identify the performance obligations in the contract.
- Determine the transaction price.
- Allocate the transaction price to the performance obligations in the contracts.
- Recognize revenue when (or as) the entity satisfies a performance obligation.

Under IFRS 15, an entity recognizes revenue when or as a performance obligation is satisfied, i.e. when 'control' of the goods or services underlying the particular performance obligation is transferred to the customer. Far more prescriptive guidance has been added on topics such as the point in which revenue is recognized, accounting for variable consideration, costs of fulfilling and obtaining a contract, and various related matters. New disclosure requirements about revenue are also introduced.

Amendments to IFRS 2 *Share-based Payment* – classification and measurement of share-based payments

Amendments to IFRS 4 *Insurance Contracts* – application of IFRS 9 *Financial Instruments* to IFRS 4 *Insurance Contracts*

Interpretation of IFRIC 22 *Foreign Currency Transactions and Advance Consideration*. The Interpretation clarifies that when an entity pays or receives consideration in advance in a foreign currency, the date of the transaction for the purpose of determining the exchange rate to use on initial recognition of the related asset, expense, or income is the date of the advance consideration, i.e. when the prepayment or liability in respect of the income received in advance was recognized. If there is more than one advance payment or receipt the date of the transaction for each payment of receipt of advance consideration should be determined. Entities may elect to apply amendments either retrospectively or prospectively.

The NBU has applied this interpretation prospectively.

Amendments to IAS 40 *Investment Property* – transfers of investment property. The amendments are intended to clarify that an entity can only reclassify a property to/from investment property when, and only when, there is evidence that a change in the use of the property has occurred. The amendments emphasize that a change in management's intentions alone would not be enough to support a transfer of property. The Standard has a list of circumstances that evidence a change in use, which is perceived by some as being exhaustive, the amendments make it clear that they are only examples. Entities may elect to apply them either retrospectively (if it is possible without the use of hindsight) or prospectively.

NBU applied this amendment prospectively.

Annual Improvements to IFRS 2014–2016 Cycle.

Standards in Issue but not yet Effective

Management expects that application of the following IFRSs and amendments will have no significant effect on the NBU's consolidated performance and financial position.

The NBU has not applied the following new and revised IFRSs that have been issued but are not yet effective:

IFRS 16 *Leases*[1]

Amendments to IFRS 10 *Consolidated Financial Statements* and IAS 28 *Investments in Associates and Joint Ventures* – Sale or contribution of assets between an investor and its associate or joint venture[4]

IFRS 17 *Insurance Contracts* – A new financial reporting standard for insurance contracts, which addresses issues of recognition and evaluation, presentation and disclosure[3]

Interpretation of IFRIC 23 *Uncertainty over Income Tax Treatments*[1]

Amendments to IFRS 9 *Financial Instruments* – prepayment features with negative compensation[1]

Amendments to IAS 28 *Investments in Associates and Joint Ventures* – An explanation that the decision to evaluate investment objects at fair value through profit or loss should be applied separately to each investment[1]

Amendments to IAS 19 *Plan Amendment, Curtailment or Settlement*[1]

Amendments to IAS 1 and IAS 8 – designed to facilitate an understanding of the materiality definition in IAS 1 and not intended to change the underlying concept of materiality in IFRS. The definition of materiality in IAS 8 was replaced by a reference to IAS 1[2]

Amendments to References to the Conceptual Framework in IFRS Standards[2]

Amendments to IFRS 3 Business Combinations [2]

Annual Improvements to IFRS 2015–2017 Cycle[1]

1 Effective for annual periods beginning on or after 1 January 2019, with earlier application permitted

2 Effective for annual periods beginning on or after 1 January 2020, with earlier application permitted

3 Effective for annual periods beginning on or after 1 January 2021, with earlier application permitted

4 Effective for annual periods beginning on or after a date to be determined. Earlier application is permitted

The NBU will adopt the following new and revised Standards in issue, but not yet effective.

IFRS 16 *Leases* (effective for annual periods beginning on or after 1 January 2019, with early application permitted). IFRS 16 specifies how an IFRS reporter will recognize, measure, present, and disclose leases. The Standard provides a single lessee accounting model, requiring lessees to recognize assets and liabilities for all leases unless the lease term is twelve months or less or the underlying asset has a low value. Lessors continue to classify leases as operating or finance, with IFRS 16's approach to lessor accounting substantially unchanged from its predecessor, IAS 17 *Leases*.

Amendments to IFRS 10 *Consolidated Financial Statements* and IAS 28 *Investments in Associates and Joint Ventures* – sale or contribution of assets between an investor and its associate or joint venture. The amendments to IFRS 10 and IAS 28 deal with situations where there is a sale or contribution of assets between an investor and its associate or joint venture. Specifically, the amendments state that gains or losses resulting from the loss of control of a subsidiary that does not contain a business in a transaction with an associate or a joint venture that is accounted for using the equity method are recognized in the parent's profit or loss only to the extent of the unrelated investors' interests in that associate or joint venture. Similarly, gains and losses resulting from the re-measurement of investments retained in any former subsidiary (that has become an associate or a joint venture that is accounted for using the equity method) to fair value are recognized in the former parent's profit or loss only to the extent of the unrelated investors' interests in the new associate or joint venture.

Amendments to IFRS 9 *Financial Instruments* – prepayment features with negative compensation. The narrow-scope amendments remedy an unintended consequence to the notion of 'reasonable additional compensation'.

The amendments allow financial assets with a prepayment option that could result in the option's holder receiving compensation for early termination to meet the SPPI condition if specified criteria are met.

In addition to that, the IASB considered the accounting for financial liabilities that are modified or exchanged that do not lead to derecognition and as a result included in the Basis for Conclusion two paragraphs on that matter. In those paragraphs, the Board observes that the accounting in such cases is the same as it is for modifying a financial asset. If the gross carrying amount of a financial asset (amortized cost of a financial liability) is changed, it will lead to an immediate gain or loss in profit or loss at the date such a financial asset (financial liability) is changed.

The amendments apply retrospectively to annual reporting periods beginning on or after 1 January 2019. Earlier application is permitted. There are specific transition provisions depending on when the amendments are first applied, relative to the initial application of IFRS 9.

According to management's estimates, the adoption of the Standards mentioned above in the future periods will not have a significant effect on the consolidated financial statements.

Application of IFRS 9 *Financial Instruments*

IFRS 9 *Financial Instruments* applies to classification and measurement of financial assets and liabilities, hedge accounting, impairment of financial assets, and their derecognition.

The NBU applied IFRS 9 ahead of schedule (the 2010 version) in the part relating to classification and measurement (other than impairment) of financial assets and liabilities to preparing its consolidated financial statements from 2012.

NBU fully moved to IFRS 9 (the 2014 version) as at 1 January 2018.

The comparative information as at 31 December 2017 was not restated for the financial instruments in the scope of IFRS 9.

The total effect of transition to IFRS 9 that was included as gain or loss on implementation of IFRS 9 in the consolidated statement of changes in equity is UAH 9 million that consists of UAH 3 million due to change in expected credit losses, UAH 4 million – reclassification, UAH 2 million – result of transition to IFRS 9 of associate company.

The following table discloses reconciliation of the carrying amounts of financial assets with their classification and changes in allowances by classes as at 1 January 2018 and the balance as at 31 December 2017 in accordance with the previous requirements of IFRS 9 (2010 version) preliminary adopted by the NBU and the requirements of the current version of IFRS 9 as at 1 January 2018:

	Notes	Category determined by IFRS 9 in the prior version	Category determined in accordance with IFRS 9	As at 31 December 2017	Changes due to Expected credit losses	Changes due to Reclassification	As at 1 January 2018 (as restated)
							(in UAH millions)
Assets							
Funds and deposits in foreign currency and investment metals	5	**Amortized cost**	**Amortized cost**	**23,800**	**(3)**	**–**	**23,797**
Foreign currency cash		Amortized cost	Amortized cost	1,941	–	–	1,941
Demand deposits, other than funds on futures operations		Amortized cost	Amortized cost	11,636	–	–	11,636
Funds on futures operations		Fair value	Fair value through profit or loss	6	–	–	6
Term deposits in foreign currency (gross carrying value)				10,217	–	–	10,217
Allowance for expected credit losses on term deposits				–	(3)	–	(3)
Term deposits in foreign currency (carrying value)		Amortized cost	Amortized cost	10,217	(3)	–	10,214
Foreign securities:	6			**414,455**			**414,455**
Foreign debt securities		Fair value	Fair value through profit or loss	414,334	–	–	414,334
Equity instruments		Fair value	Fair value through profit or loss	121	–	–	121
SDR holdings	7	**Amortized cost**	**Amortized cost**	**60,860**	**–**	**–**	**60,860**
Domestic securities	8			**372,697**	**(1)**	**(4)**	**372,692**
Government		Fair value		101	–	(101)	–
		Amortized cost	Amortized cost	370,967	–	97	371,064
Corporate securities (gross carrying value)				954	–	–	954
Allowance for expected credit losses on domestic securities				–	(1)	–	(1)
Corporate securities (carrying value)		Amortized cost	Amortized cost	954	(1)	–	953
Derivative securities		Fair value	Fair value through profit or loss	675	–	–	675
Loans to banks and other borrowers (gross carrying value)	9			75,085	–	–	75,085
Allowance for expected credit losses on loans to banks and other borrowers				(42,668)	(1)	–	(42,669)
Loans to banks and other borrowers (carrying value)		**Amortized cost**	**Amortized cost**	**32,417**	**(1)**	**–**	**32,416**
Internal state debt		**Amortized cost**	**Amortized cost**	**1,926**	**–**	**–**	**1,926**
IMF quota contributions	10	**Amortized cost**	**Amortized cost**	**80,415**	**–**	**–**	**80,415**
Other assets	12			**945**	**2**	**–**	**947**
Loans to the NBU's employees (gross carrying value)				126	–	–	126
Allowance for loans to the NBU's employees				(8)	2	–	(6)
Loans to the NBU's employees (carrying value)		Amortized cost	Amortized cost	118	2	–	120
Accounts receivable (gross carrying value)				813	–	–	813
Allowance for accounts receivable				(4)	–	–	(4)
Accounts receivable (carrying value)		Amortized cost	Amortized cost	809	–	–	809
Property rights on loan agreements		Fair value	Fair value through profit or loss	16	–	–	16
Other financial assets		Amortized cost	Amortized cost	**2**	–	–	2
Total financial assets				**987,515**	**(3)**	**(4)**	**987,508**
Liabilities							
Banknotes and coins in circulation		Amortized cost	Amortized cost	361,544	–	–	**361,544**
Accounts of banks	13	Amortized cost	Amortized cost	39,994	–	–	**39,994**
Accounts of government and other institutions	14	Amortized cost	Amortized cost	56,124	–	–	**56,124**
Certificates of deposit issued by the NBU	15	Amortized cost	Amortized cost	67,024	–	–	**67,024**
Borrowings received	16	Amortized cost	Amortized cost	2,807	–	–	**2,807**
Liabilities to the IMF, except for quota contributions	17	Amortized cost	Amortized cost	206,245	–	–	**206,245**
Liabilities to the IMF in respect of quota contributions	17	Amortized cost	Amortized cost	80,411	–	–	**80,411**
Other financial liabilities	18	Amortized cost	Amortized cost	458	–	–	**458**
Total financial liabilities				**814,607**	**–**	**–**	**814,607**

Approach to Presenting Gross Carrying Amounts and Allowances for Expected Credit Losses on a Net Basis

The approach applied to disclosing gross carrying amounts and allowances for expected credit losses is on a net basis, i.e. the initial recognition and derecognition on financial assets during the reporting year are not included in disclosures.

Change in Accounting Policies Regarding the Consolidated Statement of Cash Flows

Effective from 1 January 2018, the NBU changed its accounting policies to preparing the consolidated statement of cash flows under direct method. Data for the previous year were restated in accordance with the new accounting policies.

The NBU's management believes that such accounting policies present more adequately the information about the effect of transactions, other events, and conditions on cash flows of the NBU compared to indirect method.

Changes in Accounting Policy on Determination of Unrealized and Realized Results for Foreign Currencies, Monetary gold and banking metals

Effective from early 2018, the NBU's accounting policies have been changed to the approach of determining realized gains or losses on operations in foreign currency, monetary gold, and investment metals due to implementation of a new *Procedure for Calculating Net Open Currency Position and Determining Unrealized and Realized Gains or Losses on Operations in Foreign Currency, Monetary Gold, and Investment Metals*. The new procedure considers the best practices of European national central banks and is aimed at reconciling the realized gains or losses recorded with the economic result from managing assets and liabilities in foreign currency, monetary gold, and investment metals.

Effective from 2016, the NBU has been improving its approach to managing assets and liabilities, in the first hand, in part of managing financial risks of international (gold currency) reserves. In particular, considering the available significant liabilities in SDR, which is a composite currency, the NBU covers a short currency position in SDR by assets in foreign currencies that compose the SDR portfolio (USD, EUR, GBP, JPY, CNY). Such approach allows to reduce the general susceptibility of the NBU to currency risks by agreeing the characteristics of relevant financial assets and liabilities in foreign currency, monetary gold, and investment metals.

At the same time, prior accounting policies of the NBU allowed calculating and recognizing realized gains or losses separately by each operation in foreign currency, monetary gold, and investment metals, without considering the character of such operations and their impact on the difference between international (gold currency) reserves and underlying liabilities of the NBU in foreign currency and on the NBU's foreign currency risks. Changes in accounting policies of the NBU are aimed at removing those deficiencies.

In accordance with IFRS requirements to application of new accounting policies, the NBU has recalculated realized and unrealized results for transactions in foreign currencies and monetary gold retrospectively.

As a result, changes in accounting policies have affected the amount of liabilities to the State Budget of Ukraine that was calculated prospectively. The effect of changes in accounting policies in the amount of UAH 22,011 million was recognized in 2018 and included in profit before distribution attributable to transfer to the State Budget of Ukraine as at 31 December 2018 (Note 19).

3 Critical Accounting Estimates and Judgments in Applying Accounting Policies

The NBU makes estimates, assumptions, and judgments that affect the amounts of assets and liabilities reported in the consolidated financial statements. Estimates and judgments are continually revised and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The most significant estimates and judgments are described below.

Financial Assets Measured at Amortized Cost

NBU Management has reviewed the financial assets carried at amortized cost and confirmed that:

Assets are held within a business model that is aimed at holding assets in order to collect contractual cash flows.

Contractual terms and conditions of the financial assets stipulate for the receipt of cash flows on specific dates that are intended only to repay a principal and interest for the outstanding principal amount.

Critical Assumptions and Judgments relating to Future Events that May Lead to Material Adjustments in the Carrying Value of Assets and Liabilities in the Future Financial Year

Assessment of Expected Credit Losses on the Demand and Term Deposits in Foreign Currency and Monetary Gold

The NBU reviews on a regular basis its demand deposits and term deposits in foreign currency and monetary gold measured at amortized cost for potential impairment. In determining the need to recognize allowances for impairment, the NBU's management uses the aggregated statistical information of international rating agencies of Fitch Ratings, Moody's, and Standard & Poor's for the period that allows considering the effect of economic cycle (at least 10 years) in order to assess a probability of default (PD) and loss given default (LGD).

To project PD level and, accordingly, to calibrate the probability of default curve, in accordance with the expected phase of the economic cycle the forward looking information is used.

Demand deposits and term deposits in foreign currency and monetary gold are considered to have a low credit risk if the category of long-term credit ratings of the counterparty under a relevant financial instrument at the reporting date is higher than "BBB-", i.e. belongs to 'investment class', which confirms a high capability of the counterparty to fulfill all its contractual obligations in the foreseeable future (i.e. its high current credit ability), even if unfavorable movements in economic environment and business activity in a long-term perspective may, but not necessarily, reduce the credit ability of such a counterparty.

Demand deposits and term deposits in foreign currency and monetary gold are treated as conditionally unexposed to credit risk if they are direct liabilities of:

- the International Monetary Fund and the Bank for International Settlements denominated in any foreign currency
- a state denominated in the currency of that state, other than liabilities in EUR
- a foreign central bank in the currency of the country of origin of that central bank, other than liabilities in EUR
- the European Central Bank, the government of the Federative Republic of Germany, and Deutsche Bundesbank denominated in EUR.

As at 31 December 2018 and 1 January 2018, all demand deposits and term deposits in foreign currency had a low level credit risk or were conditionally unexposed to credit risk.

Assessment of Expected Credit Losses on Domestic Securities Measured at Amortized Cost

The NBU reviews on a regular basis its portfolio of securities measured at amortized cost for potential impairment. In determining the need to recognize allowances for impairment, the NBU's management uses judgments regarding the availability of indicators that evidence on significant increase in credit risk and the decrease in future cash flows from the portfolio of securities. Such indicators may include data that characterize a negative shift in the issuer's solvency.

Government securities denominated in the currency of a relevant country, other than liabilities in EUR, are treated as conditionally unexposed to credit risk. For the debt securities that are treated as conditionally unexposed to credit risk, probabilities of default for 12 months and over expected life of a financial instrument are considered to be insignificant, i.e. approximating to nil.

The NBU's management believes that, as at 31 December 2018 and 1 January 2018, no indication existed as to impairment of the securities measured at amortized cost and a significant increase in their credit risk. All domestic government securities carried in the NBU's portfolio at amortized cost were denominated in UAH, thus, were treated as conditionally unexposed to credit risk.

Assessment of Expected Credit Losses on Loans to Banks and Other Borrowers

The NBU regularly reviews its loan portfolio to assess the potential impairment.

Most of the NBU's loans to banks and other borrowers are assessed on an individual basis. The NBU's management makes judgments to assess future cash flows of each specific loan. Allowance for expected credit losses on loans is calculated by discounting future cash flows of those loans, with reference to repayment of the loan and sale of collateral under the respective loan. In measuring future impairment of the loans to banks that are in the process of liquidation, considered to be insolvent, or experiencing significant financial difficulties, management makes judgments and estimates future cash flows of the collateral sold. However, for some loans, which were recognized as credit impaired as at 31 December 2018 (stage 3), management expects recovery of loans mainly from cash inflows as a result of repayment of the debt, and not from the sale of collateral.

The NBU determines the value of properties obtained as collateral under lending transactions at fair value. Allowance for expected credit losses on loans may be affected by the assessed property value which requires professional judgment. Accounting estimates related to the property appraisals in the absence of active market-based prices are considered to be a key source of uncertainty due to the fact that: (i) they are highly susceptible to change from period to period, and (ii) a potential impact from recognition of such estimates may be material.

The methodology and assumptions used for estimating both the amount and timing of future cash flows are reviewed regularly to reduce any differences between loss estimates and the actual loss experienced.

A 10% decrease or increase in the estimated future discounted cash flows for loans on stage 3 assessed on individual basis, which could arise from differences in amounts and timing of the cash flows, would result in the increase allowance for expected credit losses in the amount of UAH 1,639 million or their decrease in the amount of UAH 884 million, respectively, as at 31 December 2018 (31 December 2017: would result in the increase of loan impairment allowances in the amount of UAH 1,989 million or their decrease in the amount of UAH 974 million, respectively).

Impairment of Property and Equipment and Intangible Assets

At the end of each reporting period, the NBU's management reviews the carrying amounts of property and equipment and intangible assets to assess their potential impairment if certain events or changes in circumstances indicate to possible impairment of their carrying amounts (Note 11). The impairment of property and equipment and intangible assets is measured by estimating the recoverable values of assets.

Provision for Potential Litigation Costs Incurred under Claims against the NBU

The NBU's management analyzes legal claims under which it acts as a defendant in order to identify whether potential losses are highly probable that may cause the NBU make payments in favor of another party – a claimant. The NBU estimates the potential losses as highly probable, in the event the court of the first instance passes a ruling not in favor of the NBU.

Related Party Transactions

In the normal course of business, the NBU enters into transactions with its related parties, being mainly the government and state-controlled banks and entities. IFRS 9 requires that the initial recognition of financial instruments be based on their fair values. Judgment is applied in determining whether transactions are priced at market or non-market interest rates, where there is no active market for such transactions. The basis for judgment is pricing for similar types of transactions with unrelated parties and effective interest rate analysis.

The terms and conditions of related party transactions are disclosed in Note 35.

4 Impact of Economic Environment on the Financial Position and Performance of the National Bank of Ukraine

In 2018, economic growth accelerated in Ukraine. Real GDP grew by 3.3% as at the year-end (versus 2.5% as at the end of 2017) (http://ukrstat.gov.ua).

The growth in real GDP was mainly due to household spending, which rose significantly on the back of the increase in household income and the relatively strong consumer sentiment. In turn, the increase in household income was fueled by higher wages (real wages increased by 12.5% in 2018) (http://ukrstat.gov.ua), pensions, and remittances from labor migrants. Agricultural production also made a major contribution thanks to the record harvest of grains and oil crops. However, the deteriorated external environment and the complicated cargo transportation in the Sea of Azov in the second half of the year dampened growth in industrial output and exports and affected financial performance of companies, which weighed on investment activity.

In 2018, the deficit of the current account of balance of payments widened to USD 4.5 billion (compared to USD 2.4 billion in 2017) due to the increase in trade deficit and dividend payments. On the other hand, capital inflows to private and public sectors (the inflows to the public sector came from Eurobond placement and the receipt of official financing) resulted in higher inflows to the financial account, amounting to USD 7.4 billion (versus USD 5 billion in 2017). A surplus of the overall balance of payments enabled international reserves to grow from USD 18.8 billion at the beginning of 2018 to USD 20.8 billion at the end of the year.

In 2018, consumer price inflation slowed to 9.8% (versus the acceleration to 13.7% in 2017) (http://ukrstat.gov.ua), and core inflation declined to 8.7% (9.5% as at the year-end 2017) (http://ukrstat.gov.ua).

It was mainly the NBU's tight monetary policy that curbed inflation and brought it back to a one-digit figure. In 2018, the NBU raised its key policy rate four times – to 18.0% p.a. The tight monetary conditions were one of the reasons behind the strengthening of the hryvnia (from UAH/USD 28.07 as of 31 December 2017 to UAH/USD 27.69 as of 31 December 2018).

Notwithstanding the decline in inflation, it still predictably exceeded the NBU's target of 6% ± 2 pp at the end of 2018, which was the level set in the Monetary Policy Guidelines for 2018 and the Medium Term.
(https://bank.gov.ua/doccatalog/document?id=55564681).
Inflation deviated from the target mainly due to factors on which the monetary policy has little influence. In particular, these were the increase in administered prices, the rise in global crude oil prices throughout most of the year, and uncertainty over further cooperation with the International Monetary Fund (IMF) amid the election cycle.

At the end of the year, pro-inflationary risks weakened, particularly thanks to the continued cooperation between Ukraine and the IMF under the new Stand-By Arrangement. As a result, the NBU Board kept the key policy rate unchanged twice in Q4 2018.

In 2018, the banking system maintained a liquidity surplus, which narrowed substantially from the mid-year. The amount of certificates of deposit decreased by UAH 5.2 billion, to UAH 61.9 billion at the end of 2018. Banks' correspondent account balances dropped by UAH 1.9 billion, to UAH 35.7 billion at the end of the year. In addition, the fluctuations in the banking system's liquidity seen throughout the year and the uneven distribution of liquidity resulted in one-off demand for refinancing loans from some banks.

The situation on the FX market was mainly favorable in 2018, which allowed the NBU to purchase foreign currency in order to replenish international reserves without counteracting the fundamental trends on the market.

As of 31 December 2018, Moody's rating agency upgraded the sovereign rating of Ukraine to Caa1, while Standard & Poor's and Fitch maintained their ratings for Ukraine at B- (as at 31 December 2017, Moody's rated Ukraine as Caa2, Standard & Poor's as B-, and Fitch as B-).

Changes in the Operating and Political Environment in Ukraine in 2018

During 2018 Ukrainian economy was still under influence of the pendent armed conflict in certain parts of Luhansk and Donetsk oblasts, as well as further tensions in political and economic relations with Russia. Under such circumstances, the Ukrainian economy continued to refocus on the market of the European Union (EU), utilizing the full potential of the Deep and Comprehensive Free Trade Area established between the EU and Ukraine. As a result, the share of export and import operations with Russia decreased markedly to 7.2% and 14.9% in 2018 from 17.6% and 24.2% in 2014, respectively.

A new currency law comes into force on 7 February 2019.

In particular, the NBU loosens a whole range of currency restrictions for businesses and households and introduces an additional tool for smoothing out exchange rate fluctuations – currency interventions on swap terms. The ultimate goal of these legislative changes is transition to a free movement of capital, which, however, will occur gradually.

Further economic growth and maintaining macro-financial stability depends, to a large extent, on the successful implementation of planned reforms by the Ukrainian government, the cooperation with the IMF, and the smooth running of the presidential and parliamentary elections, which are slated for April and October 2019, respectively.

5 Funds and Deposits in Foreign Currency and Investment Metals

	2018	2017
		(in UAH millions)
Financial assets measured at amortized cost		
Foreign currency cash	**1,816**	1,941
Demand deposits	**41,592**	11,636
Term deposits in foreign currency	**73,288**	10,217
Allowances for expected credit losses on placed deposits in foreign currency measured at amortized cost	**(25)**	–
Total financial assets measured at amortized cost	**116,671**	23,794
Financial assets measured at fair value through profit or loss		
Demand deposits to make settlements on futures operations	**10**	6
Total financial assets	**116,681**	23,800
Nonfinancial assets		
Term and demand deposits:		
In gold	–,	1,368
Total nonfinancial assets	–,	1,368
Total funds and deposits in foreign currency and investment metals	**116,681**	25,168

As at 31 December 2018, included in demand deposits measured at amortized cost were balances on special purpose accounts in the amount of UAH 169 million (31 December 2017: UAH 59 million) maintained by the NBU under credit lines received from international financial institutions and which are restricted for use.

As at 31 December 2018, included in demand deposits measured at fair value through profit or loss were funds in the amount of UAH 10 million (31 December 2017: UAH 6 million) maintained to make settlements on futures operations within the framework of agreements on managing investments and rendering advisory services between the International Bank for Reconstruction and Development and the National bank of Ukraine (Note 32).

As at 31 December 2017, term deposits in gold earned interest paid in USD.

As at 31 December 2018 and 2017, all funds and deposits in foreign currency were neither past due nor impaired and were not collateralized.

All foreign currency denominated funds and deposits could be recovered within 12 months (31 December 2017: all foreign currency denominated funds and deposits were expected to be recovered within 12 months).

Funds and deposits in foreign currency are analyzed by geographical concentration risk in Note 27, by credit risk – in Note 28, by foreign currency risk – in Note 29, by interest rate risk – in Note 30, and by liquidity risk – in Note 31.

During the year ended 31 December 2018, movements in gross carrying amounts of demand deposits were as follows:

	Stage 1	Stage 2	Stage 3	Initially credit-impaired assets	Total
					(in UAH millions)
Gross carrying value of demand deposits as at 1 January 2018	11,636	–	–	–	**11,636**
Purchased/originated assets	29,956	–	–	–	29,956
Transfer to Stage 1	–	–	–	–	–
Transfer to Stage 2	–	–	–	–	–
Transfer to Stage 3	–	–	–	–	–
Derecognized or repaid assets	–	–	–	–	–
Assets written off against allowances for expected credit losses	–	–	–	–	–
Other changes	–	–	–	–	–
Gross carrying value of demand deposits as at 31 December 2018	**41,592**	–	–	–	**41,592**

During the year ended 31 December 2018, no allowances for expected credit losses on demand deposits were created.

During the year ended 31 December 2018, movements in gross carrying amounts of term deposits in foreign currency were as follows:

	Stage 1	Stage 2	Stage 3	Initially credit-impaired assets	Total
					(in UAH millions)
Gross carrying value of term deposits in foreign currency as at 1 January 2018	10,217	–	–	–	**10,217**
Purchased/originated assets (placed)	73,288	–	–	–	73,288
Transfer to Stage 1	–	–	–	–	–
Transfer to Stage 2	–	–	–	–	–
Transfer to Stage 3	–	–	–	–	–
Derecognized or repaid assets (returned)	(10,217)	–	–	–	(10,217)
Assets written off against allowances for expected credit losses	–	–	–	–	–
Adjustment of interest income	–	–	–	–	–
Other changes	–	–	–	–	–
Gross carrying value of term deposits in foreign currency as at 31 December 2018	**73,288**	–	–	–	**73,288**

During the year ended 31 December 2018, movements in allowances for expected credit losses on term deposits in foreign currency were as follows:

	Stage 1	Stage 2	Stage 3	Initially credit-impaired assets	Total
					(in UAH millions)
Allowance for expected credit losses on term deposits in foreign currency as at 1 January 2018	3	–	–	–	3
Purchased/originated assets	25	–	–	–	25
Transfer to Stage 1	–	–	–	–	–
Transfer to Stage 2	–	–	–	–	–
Transfer to Stage 3	–	–	–	–	–
Derecognized or repaid assets	(3)	–	–	–	(3)
Assets written off against allowances for expected credit losses	–	–	–	–	–
Adjustment of interest income	–	–	–	–	–
Change in parameters/models used for calculating allowances for expected credit losses and their partial repayment	–	–	–	–	–
Allowance for expected credit losses on term deposits in foreign currency as at 31 December 2018	**25**	–	–	–	**25**

6 Foreign Securities

As at 31 December 2018, foreign securities comprised the following:

	Government bonds	Securities of international agencies, banks, and other issuers	Total
			(in UAH millions)
Foreign securities measured at fair value through profit or loss:			
Debt securities by issuers:			
Securities issued by the US issuers:			
Denominated in USD	173,912	6,609	180,521
Securities issued by the EU states issuers:			
Denominated in USD	14,705	60,884	75,589
Denominated in EUR	178	13,517	13,695
Denominated in GBP	3,251	3,619	6,870
Denominated in CNY	–	406	406
Securities of other issuers:			
Denominated in USD	3,137	83,386	86,523
Denominated in EUR	–	38,841	38,841
Denominated in AUD	605	296	901
Denominated in GBP	–	3,232	3,232
Denominated in CNY	–	20,949	20,949
Denominated in JPY	–	5,343	5,343
Total debt securities	**195,788**	**237,082**	**432,870**
Equity instruments:			
Shares of the Black Sea Trade and Development Bank	–	120	120
Investment in the Inter-State Bank	–	1	1
Total equity instruments	**–**	**121**	**121**
Total foreign securities measured at fair value through profit or loss	**195,788**	**237,203**	**432,991**

As at 31 December 2018 and 2017, all foreign debt securities were neither past due nor impaired.

In 2018, interest income earned on foreign debt securities and included in gains or losses on operations with debt securities measured at fair value in the consolidated statement of comprehensive income amounted to UAH 5,072 million (2017: UAH 3,318 million).

All foreign securities were expected to be recovered within 12 months, except for equity instruments totaling UAH 121 million (31 December 2017: UAH 121 million).

Securities of 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 27, by credit risk – in Note 28, by foreign currency risk – in Note 29, by interest rate risk – in Note 30, and by liquidity risk – in Note 31.

As at 31 December 2017, foreign securities comprised the following:

	Government bonds	Securities of international agencies, banks, and other issuers	Total
			(in UAH millions)
Foreign securities measured at fair value:			
Debt securities by issuers :			
Securities issued by the US issuers: Denominated in USD	162,830	12,834	175,664
Securities issued by the EU states issuers:			
Denominated in USD	20,229	76,921	97,150
Denominated in EUR	704	13,363	14,067
Denominated in GBP	4,789	3,232	8,021
Denominated in CNY	–	2,142	2,142
Securities of other issuers:			
Denominated in USD	2,912	58,667	61,579
Denominated in EUR	–	27,083	27,083
Denominated in AUD	657	332	989
Denominated in GBP	–	2,778	2,778
Denominated in CNY	–	12,957	12,957
Denominated in JPY	–	11,904	11,904
Total debt securities	**192,121**	**222,213**	**414,334**
Equity instruments:			
Shares of the Black Sea Trade and Development Bank	–	120	120
Investment in the Inter-State Bank	–	1	1
Total equity instruments	**–**	**121**	**121**
Total foreign securities measured at fair value	**192,121**	**222,334**	**414,455**

Information on nominal value, yield to maturity, coupon income, and maturities of foreign debt securities held by the NBU as at 31 December 2018 is presented in the table below:

	Total nominal value in foreign currency, in millions	Total nominal value in UAH equivalent, in UAH millions	Yield to maturity, % p.a.	Coupon rate, % p.a.	Frequency of coupon payments	Maturity
Debt securities measured at fair value through profit or loss by issuers:						
Government bonds:						
Securities issued by the US issuers: Denominated in USD	6,323	175,077	2.5–2.7	0.875–3.625	Every 6 months	From 7.6 months to 2.9 years
Securities issued by the EU states issuers:						
Denominated in USD	534	14,777	2.6–2.9	1.125–2.726 94	Quarterly, every 6 months, or annually	From 4.7 months to 1.8 years
Denominated in EUR	6	174	0	0.375	Annually	Up to 4.1 years
Denominated in GBP	92	3,243	0.7–0.8	0.5–2.0	Every 6 months	From 6.8 months to 3.6 years
Securities of other issuers:						
Denominated in USD	115	3,179	2.5–2.9	1.25–2.91963	Quarterly, every 6 months	From 1 month to 3.8 years
Denominated in AUD	29	565	1.9	1.75–5.75	Every 6 months	From 1.9 years to 3.9 years

	Total nominal value in foreign currency, in millions	Total nominal value in UAH equivalent, in UAH millions	Yield to maturity, % p.a.	Coupon rate, % p.a.	Frequency of coupon payments	Maturity
Bonds of international agencies, banks, and other issuers:						
Securities issued by the US issuers: Denominated in USD	239	6,617	2.6–3.2	1.25–2.96819	Quarterly, every 6 months	From 9.6 months to 3 years
Securities issued by the EU states issuers:						
Denominated in USD	2,208	61,122	2.5–3.8	0–3.6475	Quarterly, every 6 months, or annually, without coupon repayment	From 14 days to 4.5 years
Denominated in EUR	423	13,415	0–0.4	0–4.125	Quarterly, every 6 months, without coupon repayment	From 2.9 months to 5.4 years
Denominated in GBP	103	3,619	0.9–1.0	0–1.125	Annually, without coupon repayment	From 4.7 months to 1 year
Denominated in CNY	100	403	4.3	4.5	Every 6 months	1.9 years
Securities of other issuers:						
Denominated in USD	3,021	83,655	2.6–3.9	0–3.7475	Quarterly, every 6 months, without coupon repayment	From 1.4 months to 4.8 years
Denominated in EUR	1,225	38,850	0–0.9	0–0.75	Quarterly, annually, without coupon repayment	From 14 days to 4.4 years
Denominated in AUD	15	293	2.6	2.79	Quarterly	2.9 years
Denominated in GBP	92	3,232	1.1–1.6	0.875–1.29244	Quarterly, annually	From 6.9 months to 2.8 years
Denominated in CNY	5,295	21,316	0.1–4.4	0–4.8	Annually, without coupon repayment	From 18 days to 2.4 years
Denominated in JPY	21,300	5,344	0.1–0.4	0–0.42	Every 6 months, without coupon repayment	From 2 months to 2.9 years

Information on nominal value, yield to maturity, coupon income, and maturities of foreign debt securities held by the NBU as at 31 December 2017 is presented in the table below:

	Total nominal value in foreign currency, in millions	Total nominal value in UAH equivalent, in UAH millions	Yield to maturity, % p.a.	Coupon rate, % p.a.	Frequency of coupon payments	Maturity
Debt securities measured at fair value through profit or loss by issuers :						
Government bonds:						
Securities issued by the US issuers: Denominated in USD	5,834	163,750	1.3–2	0.625–2.375	Every 6 months	From 2.5 months to 2.9 years
Securities issued by the EU states issuers:						
Denominated in USD	724	20,312	1.7–2.3	1–1.875	Quarterly, every 6 months, or annually	From 1.7 months to 2.8 years
Denominated in EUR	20	653	0.1–0.2	0.375–1.65	Annually	From 5.1 years to 6.8 years
Denominated in GBP	123	4,653	0.4–0.5	1.25–2	Every 6 months	From 6.8 months to 2.6 years
Securities of other issuers:						
Denominated in USD	105	2,941	1.9–2.4	1.25–2.125	Quarterly, every 6 months	From 1.5 years to 4.8 years
Denominated in AUD	29	640	2–2.1	1.75–4.5	Every 6 months	From 2.3 years to 2.9 years
Bonds of international agencies, banks, and other issuers:						
Securities issued by the US issuers: Denominated in USD	459	12,883	1.7–2.4	0.875–2.45	Quarterly, every 6 months	From 5.5 months to 4 years
Securities issued by the EU states issuers:						
Denominated in USD	2,748	77,134	1.6–2.6	0–2.44352	Quarterly, every 6 months, or annually, without coupon repayment	From 12 days to 5 years
Denominated in EUR	397	13,298	0–0.2	0–1.5	Quarterly or annually, without coupon repayment	From 2.7 months to 6.4 years
Denominated in GBP	85	3,207	0.6–0.7	0–1.125	Annually, without coupon repayment	From 2.5 months to 2 years
Denominated in CNY	500	2,147	3.9–4.4	0–4.5	Every 6 months, without coupon repayment	From 1.4 months to 2.9 years
Securities of other issuers:						
Denominated in USD	2,093	58,750	1.7–3.5	0–2.75	Quarterly, every 6 months, without coupon repayment	From 8 days to 4.7 years
Denominated in EUR	809	27,098	0–1	0–0.875	Annually, without coupon repayment	From 2.7 months to 5.4 years
Denominated in AUD	15	328	2.9	2.57	Quarterly	3.9 years
Denominated in GBP	74	2,785	0.7–1.1	0–0.875	Annually, without coupon repayment	From 1.7 months to 2.5 years
Denominated in CNY	3,036	13,037	0.4–4.9	0	Without coupon repayment	From 19 days to 11.6 months
Denominated in JPY	47,900	11,908	0–0.1	0	Without coupon repayment	From 2.9 months to 9.7 months

7 SDR Holdings

SDR holdings are demand funds denominated in SDR on the account opened with the IMF for Ukraine.

Movements in SDR holding account during the years ended 31 December 2018 and 2017 were as follows:

	2018	2017
		(in UAH millions)
Balance of SDR holdings as at 1 January	**60,860**	73,546
Proceeds from the IMF:		
In favor of the NBU (Note 17)	**38,309**	27,062
In favor of the Government	–	–
Purchase of SDRs	**8,767**	–
Other proceeds and payments	**183**	137
Repayment of loans:		
On behalf of the NBU (Note 17)	**(19,989)**	(8,412)
On behalf of the Government	**(37,536)**	(15,117)
Payment of loan related fees and commissions	**(927)**	(564)
Translation of SDRs to other foreign currencies		
In favor of the NBU	**(38,309)**	(13,532)
In favor of the Government	–	–
Payment of interest for the use of the IMF loans:		
On behalf of the NBU	**(5,491)**	(4,609)
On behalf of the Government	**(3,498)**	(3,524)
Payment of interest for the use of funds received under SDR allocation:		
On behalf of the NBU	**(27)**	(13)
On behalf of the Government	**(413)**	(200)
Other payments	**(1)**	(1)
Income on SDR holdings	**219**	387
Translation differences	**(2,047)**	5,700
Balance of SDR holdings as at 31 December	**100**	60,860

In 2018, the account of SDR holdings received funds in the amount of SDR 1,000 million (UAH 38,309 million at the official exchange rate at the date of payment) under the Stand-By Program, which were translated to other foreign currencies.

In 2017, the account of SDR holdings received funds in the amount of SDR 734 million (UAH 27,062 million at the official exchange rate at the date of payment) under the Extended Funding Facility (hereinafter, “the EFF”) Program, of which SDR 367 million (UAH 13,532 million at the official exchange rate at the date of payment) were translated to other foreign currencies.

SDR holdings are analyzed by geographical concentration risk in Note 27, by foreign currency risk – in Note 29, by interest rate risk – in Note 30, and by liquidity risk – in Note 31.

8 Domestic Securities

As at 31 December 2018, domestic securities comprised the following:

	Government securities	Corporate securities	Total
			(in UAH millions)
Derivative securities measured at fair value through profit or loss:			
Denominated in foreign currencies:			
Government derivatives denominated in USD	**692**	–	692
Total derivative securities measured at fair value through profit or loss	**692**	–	692
Debt securities measured at amortized cost:			
Denominated in the national currency:			
Domestic government loan bonds	360,744	–	360,744
Total debt securities measured at amortized cost	**360,744**	–	360,744
Total domestic securities	**361,436**	–	361,436

In accordance with the Law of Ukraine *On the National Bank of Ukraine*, the NBU performs operations with domestic securities (hereinafter, "DGLBs") only in the secondary market.

DGLBs are issued by the Ministry of Finance of Ukraine. The nominal value of DGLBs is UAH 1,000 each.

In 2018, the NBU did not purchase any DGLBs (2017: the NBU purchased UAH-denominated DGLBs for the total nominal value of UAH 1,406 million in order to support the liquidity of PJSC "Privatbank" upon its transfer to public ownership in December 2016 and for the total nominal value of UAH 2,543 million in order to support the liquidity of the Household Deposit Guarantee Fund).

In September 2018, bonds of other government institutions for the nominal value of UAH 950 million were fully repaid. As at 31 December 2017, bonds of other government institutions included the bonds issued by the National Agency of Roads of Ukraine (Ukravtodor), with the additional collateral in the form of the Government's guarantee of the issuer's liabilities issued by the Cabinet of Ministers of Ukraine (Ukravtodor Bonds). The Ukravtodor Bonds had the nominal value of UAH 1,000 each.

As at 31 December 2018 and 2017, all domestic securities were neither past due nor impaired.

All domestic securities are expected to be recovered later than within 12 months from the reporting date, except for the nominal amount of DGLBs and bonds of other government institutions and accrued interest on debt securities totaling UAH 23,381 million payable within 2019 (31 December 2017: all domestic securities were expected to be recovered later than within 12 months from the reporting date, except for the nominal amount of DGLBs and bonds of other government institutions and accrued interest on debt securities totaling UAH 23,783 million payable within 2018).

Domestic securities are analyzed by credit risk in Note 28, by foreign currency risk – in Note 29, by interest rate risk – in Note 30, and by liquidity risk – in Note 31. Estimated fair values of domestic securities are disclosed in Note 33.

As at 31 December 2017, domestic securities comprised the following:

	Government securities	Corporate securities	Total
			(in UAH millions)
Debt securities measured at fair value:			
Denominated in the national currency:			
Domestic government loan bonds	101	–	**101**
Total debt securities measured at fair value	**101**	**–**	**101**
Derivative securities measured at fair value:			
Denominated in foreign currencies:			
Government derivatives denominated in USD	675	–	675
Total derivative securities measured at fair value	**675**	–	675
Debt securities measured at amortized cost:			
Denominated in the national currency:			
Domestic government loan bonds	370,967	–	**370,967**
Bonds of other government institutions	–	954	**954**
Total debt securities measured at amortized cost	**370,967**	**954**	**371,921**
Total domestic securities	**371,743**	**954**	**372,697**

Information on the nominal value, yield to maturity, coupon income, and maturities of domestic securities as at 31 December 2018 is presented in the table below:

	Total nominal value and deemed cost in UAH, in UAH millions	Total nominal value and deemed cost in foreign currency, in millions	Yield to maturity, % p.a.	Coupon rate, % p.a.	Frequency of coupon payments	Maturity
Derivative securities measured at fair value:						
Denominated in foreign currencies:						
Government derivatives	1,214	44				Up to 21.4 years
Debt securities measured at amortized cost:						
Denominated in the national currency:						
Domestic government loan bonds	348,101	–	7.22–20.41	8.12–14.50	Annually, every 6 months	From 8 days to 28.9 years

Information on the nominal value, yield to maturity, coupon income, and maturities of domestic securities as at 31 December 2017 is presented in the table below:

	Total nominal value and deemed cost in UAH, in UAH millions	Total nominal value and deemed cost in foreign currency, in millions	Yield to maturity, % p.a.	Coupon rate, % p.a.	Frequency of coupon payments	Maturity
Domestic securities measured at fair value:						
Denominated in the national currency:						
Domestic government loan bonds	103	–	16.19	9.50	Every 6 months	From 1.6 years to 1.7 years
Derivative securities measured at fair value:						
Denominated in foreign currencies:						
Government derivatives	1,230	44				Up to 22.4 years
Debt securities measured at amortized cost:						
Denominated in the national currency:						
Domestic government loan bonds	360,470	–	7.21–16.21	8.12–14.50	Annually, every 6 months	From 16 days to 29.9 years
Bonds of other government institutions	950	–	17.14	14.25	Quarterly	8.7 months

During the year ended 31 December 2018, movements in gross carrying amounts of government securities were as follows:

	Stage 1	Stage 2	Stage 3	Initially credit-impaired assets	Total
					(in UAH millions)
Gross carrying value of government securities as at 1 January 2018	371,064	–	–	–	**371,064**
Purchased/originated assets	–	–	–	–	–
Transfer to Stage 1	–	–	–	–	–
Transfer to Stage 2	–	–	–	–	–
Transfer to Stage 3	–	–	–	–	–
Derecognized or repaid assets	(12,969)	–	–	–	**(12,969)**
Assets written off against allowances	–	–	–	–	–
Other changes	2,649	–	–	–	**2,649**
Gross carrying value of government securities as at 31 December 2018	360,744	–	–	–	**360,744**

During the year ended 31 December 2018, no allowances for expected credit losses on government securities were created.

During the year ended 31 December 2018 corporate securities for the total amount UAH 953 million were repaid on maturity, where UAH 954 million is gross carrying amount and UAH 1 million is allowance for expected credit losses. As at 1 January 2018 corporate securities were held on stage 1. During the year ended 31 December 2018 and up to maturity there were no transfers between stages.

9 Loans to Banks and Other Borrowers

Loans to banks and other borrowers by the purpose of their issue are classified as follows:

	2018	2017
		(in UAH millions)
Loans granted to banks to support their liquidity:		
For stabilizing banking activities	**57,094**	60,883
Loans provided through tenders conducted by the NBU	**4,494**	7,675
Other	**10**	10
Loans granted to the Household Deposit Guarantee Fund	**1,458**	6,479
Loans granted under credit lines to support small and medium entities from the funds received from the European Bank for Reconstruction and Development (the "EBRD")	**36**	36
Other	**2**	2
Allowance for expected credit losses on loans to banks and other borrowers	**(40,949)**	(42,668)
Total loans to banks and other borrowers	**22,145**	32,417

Loans granted for stabilizing banking activities, which are expected to be recovered later than within 12 months from the reporting date, amounted to UAH 7,689 million at the nominal value (31 December 2017: UAH 10,793 million).

During the year ended 31 December 2018, the NBU supported the liquidity of banks through establishing a standing refinancing line (overnight loans), refinancing banks for the period up to 90 days by holding tenders (during the year ended 31 December 2017, the NBU supported the liquidity of banks through establishing a standing refinancing line (overnight loans), refinancing banks for the period up to 14 days and up to 90 days by holding tenders).

During the year ended 31 December 2018, movements in gross carrying value of loans to banks were as follows:

	Stage 1	Stage 2	Stage 3	Initially credit-impaired assets	Total
					(in UAH millions)
Gross carrying value of loans to banks as at 1 January 2018	6,049	–	61,013	1,506	68,568
Purchased/originated loans	4,195	–	–	–	4,195
Transfer to Stage 1	–	–	–	–	–
Transfer to Stage 2	–	–	–	–	–
Transfer to Stage 3	–	–	–	–	–
Derecognized or repaid loans	(5,831)	–	(258)	(1,506)	(7,595)
Assets written off and otherwise derecognized against allowances	–	–	(48)	–	(48)
Other changes (including partial repayment)	(111)	–	(3,411)	–	(3,522)
Gross carrying value of loans to banks as at 31 December 2018	**4,302**	–	**57,296**	–	**61,598**

During the year ended 31 December 2018, all loans included to the category of initially credit-impaired were repaid. During the year ended 31 December 2018, undiscounted expected credit losses on initially credit-impaired loans to banks amounted to about nil.

During the year ended 31 December 2018, movements in allowances for loans to banks were as follows:

	Stage 1	Stage 2	Stage 3	Initially credit-impaired assets	Total
					(in UAH millions)
Allowance for expected credit losses on loans to banks as at 1 January 2018	1	–	42,630	–	**42,631**
Purchased/originated loans	–	–	–	–	–
Transfer to Stage 1	–	–	–	–	–
Transfer to Stage 2	–	–	–	–	–
Transfer to Stage 3	–	–	–	–	–
Derecognized or repaid loans	(1)	–	(42)	–	(43)
Assets written off and otherwise derecognized against allowances	–	–	(48)	–	(48)
Adjustment of interest income	–	–	(1,121)	–	(1,121)
Change in parameters/models used for calculating allowances and their partial repayment	–	–	(508)	–	(508)
Allowance for expected credit losses on loans to banks as at 31 December 2018	–	–	40,911	–	**40,911**

During the year ended 31 December 2018, movements in gross carrying value of loans to the Household Deposit Guarantee Fund were as follows:

	Stage 1	Stage 2	Stage 3	Initially credit-impaired assets	Total
				(in UAH millions)	
Gross carrying value of loans to the IDGF as at 1 January 2018	6,479	–	–	–	6,479
Purchased/originated loans	–	–	–	–	–
Transfer to Stage 1	–	–	–	–	–
Transfer to Stage 2	–	–	–	–	–
Transfer to Stage 3	–	–	–	–	–
Derecognized or repaid loans	(2,674)	–	–	–	(2,674)
Assets written off and otherwise derecognized against allowances	–	–	–	–	–
Other changes (including partial repayment)	(2,347)	–	–	–	(2,347)
Gross carrying value of loans to the IDGF as at 31 December 2018	1,458	–	–	–	1,458

During the year ended 31 December 2018, no allowances for loans to the Household Deposit Guarantee Fund were created.

As at 31 December 2018 and 1 January 2018 loans granted under credit lines to support small and medium entities from the funds received from the European Bank for Reconstruction and Development (the EBRD) and other loans were held on the stage 3, gross carrying amount was UAH 38 million, allowance for expected credit losses was UAH 38 million. During the year ended 31 December 2018 there were no transfers between stages.

During the year ended 31 December 2017, movements in allowances for expected credit losses on loans to banks and other borrowers were as follows:

	Loans granted to banks to support their liquidity	Loans granted under credit lines to support small and medium entities from the funds received from the European Bank for Reconstruction and Development	Other	Total
			(in UAH millions)	
Allowance for loans to banks and other borrowers at the beginning of the year	**48,383**	**36**	**2**	**48,421**
Net decrease in allowance	(3,151)	–	–	**(3,151)**
Loans written off against allowances	(26)	–	–	**(26)**
Adjustment of interest income on impaired loans to banks (Note 22)	(2,576)	–	–	**(2,576)**
Allowance for loans to banks and other borrowers at the end of the year	**42,630**	**36**	**2**	**42,668**

Loans to banks and other borrowers are analyzed by geographical risk concentration in Note 27, by credit risk – in Note 28, by foreign currency risk – in Note 29, by interest rate risk – in Note 30, and by liquidity risk – in Note 31. Estimated fair values of loans to banks and other borrowers are disclosed in Note 33.

10 IMF Quota Contributions

The quota balance is a special type asset which represents Ukraine's subscription 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 Fund, the limits of access to financial resources of the Fund, and a participant's share in the allocation of SDRs, the Fund's unit of account. The major part of Ukraine's quota was paid in the form of non-interest-bearing promissory notes issued by the NBU in favor of the IMF, with the remainder being credited to the IMF accounts No. 1 and No. 2 (Note 17).

As at 31 December 2018, Ukraine's total quota in the IMF amounted to SDR 2,012 million (UAH 77,472 million at the year-end official UAH/SDR exchange rate) (31 December 2017: SDR 2,012 million, or UAH 80,415 million at the year-end official UAH/SDR exchange rate). The quota does not earn interest and is a non-current asset.

The reserve position in the IMF is a specific type of assets that is created as a result of conversion of a part of contributions under the quota to liquid claims of a member country to the IMF. The reserve position is a part of currency reserves of the country.

As at 31 December 2018, the reserve position of Ukraine in the IMF amounted to SDR 241,031, or UAH 10 million at the official exchange rate of UAH against SDR at the year-end (31 December 2017: SDR 103,678, or UAH 4 million at the official exchange rate of UAH against SDR at the year-end).

IMF quota contributions are analyzed by geographical risk concentration in Note 27, by foreign currency risk – in Note 29, and by liquidity risk – in Note 31.

11 Property and Equipment and Intangible Assets

	Buildings and structures	Vehicles	Machinery and equipment	Tools, fixtures, and fittings	Other fixed assets	Construction in progress	Intangible assets	Total
								(in UAH millions)
Cost as at 1 January 2017	5,430	166	4,507	112	249	168	532	**11,164**
Depreciation and amortization as at 1 January 2017	(2,192)	(123)	(2,224)	(101)	(199)	(9)	(370)	**(5,218)**
Net book value as at 1 January 2017	**3,238**	**43**	**2,283**	**11**	**50**	**159**	**162**	**5,946**
Additions	–	–	154	2	6	15	22	**199**
Transfers to other categories, including:	–	–	18	–	(8)	(7)	(3)	–
Cost	–	1	17	–	(8)	(7)	(3)	–
Depreciation and amortization	–	(1)	1	–	–	–	–	–
Disposals, including:	(179)	–	(1)	–	(1)	(3)	–	(184)
Cost	(232)	(11)	(54)	(3)	(7)	(3)	(76)	(386)
Depreciation and amortization	53	11	53	3	6	–	76	202
Transfers to investment property:	(50)	–	–	–	–	–	–	(50)
Cost	(55)	–	–	–	–	–	–	(55)
Depreciation and amortization	5	–	–	–	–	–	–	5
Depreciation and amortization charges in the current reporting period	(114)	(13)	(306)	(2)	(8)	–	(47)	(490)
Cost as at 31 December 2017	5,143	156	4,624	111	240	173	475	10,922
Depreciation and amortization as at 31 December 2017	(2,248)	(126)	(2,476)	(100)	(201)	(9)	(341)	(5,501)
Net book value as at 31 December 2017	**2,895**	**30**	**2,148**	**11**	**39**	**164**	**134**	**5,421**
Additions	1	3	66	2	8	30	11	121
Transfers to other categories, including:	7	–	27	(1)	(3)	(25)	(5)	–
Cost	7		27	(1)	(3)	(25)	(5)	–
Disposals, including:	(177)	–	(3)	(1)	(1),	(51)	–	(233)
Cost	(265)	(6)	(61)	(8)	(9)	(51)	(33)	(433)
Depreciation and amortization	88	6	58	7	8	–	33	200
Transfers to the category held for sale	(47)	–	–	–	–	–	–	(47)
Cost	(108)	–	–	–	–	–	–	(108)
Depreciation and amortization	61	–	–	–	–	–	–	61
Transfers to investment property:	(4)	–	–	–	–	–	–	(4)
Cost	(4)	–	–	–	–	–	–	(4)
Depreciation and amortization charges in the current reporting period	(112)	(11)	(303)	(2)	(8)	–	(42)	(478)
Cost as at 31 December 2018	4,774	153	4,656	104	236	127	448	10,498
Depreciation and amortization as at 31 December 2018	(2,211)	(131)	(2,721)	(95)	(201)	(9)	(350)	(5,718)
Net book value as at 31 December 2018	**2,563**	**22**	**1,935**	**9**	**35**	**118**	**98**	**4,780**

As at 31 December 2018, historical cost of fully depreciated property and equipment which were still in operation amounted to UAH 1,646 million (31 December 2017: UAH 1,415 million).

Property and equipment and intangible assets are non-current assets.

In 2018 and 2017, no recovery of the NBU's property and equipment utility was recognized.

Disposal of property and equipment 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 2018, 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 232 million (31 December 2017: UAH 191 million), which are recognized in equity as a transaction with the founder.

12 Other Assets

	2018	2017
		(in UAH millions)
Other financial assets measured at amortized cost:		
Loans to the NBU's employees	**98**	126
Allowance for loans to employees	**(5)**	(8)
Accounts receivable	**247**	813
Allowance for accounts receivable	**(7)**	(4)
Other	**–**	2
Total other financial assets measured at amortized cost	**333**	929
Other financial assets measured at fair value through profit or loss		
Proprietary rights on loan agreements repossessed by the National Bank of Ukraine	**13**	16
Total other financial assets	**346**	945
Other nonfinancial assets		
Investment metals	**1,616**	2,064
Current tangible assets	**900**	791
Commemorative and bullion coins, souvenirs and other products	**602**	638
Precious metals and jewelry	**308**	290
Advance payments	**178**	366
Investments in associates	**132**	106
Investment property	**49**	46
Noncurrent tangible assets held for sale	**47**	–
Other	**18**	–
Allowance for other nonfinancial assets	**(8)**	(8)
Total other nonfinancial assets	**3,842**	4,293
Total other assets	**4,188**	5,238

Other financial assets are not secured.

All other assets were expected to be recovered within 12 months, except for noncurrent receivables, investment metals, and investments in associates totaling to UAH 1,795 million as at 31 December 2018 (31 December 2017: UAH 2,272 million).

During the year ended 31 December 2018, movements in gross carrying value of loans to the NBU's employees were as follows:

	Stage 1	Stage 2	Stage 3	Initially credit-impaired assets	Total
					(in UAH millions)
Gross carrying value of loans to employees as at 1 January 2018	**119**	1	6	–	126
Transfer to Stage 1	–	–	–	–	–
Transfer to Stage 2	–	–	–	–	–
Transfer to Stage 3	–	–	–	–	–
Derecognized or repaid loans	(9)	–	–	–	(9)
Assets written off against allowances	–	–	–	–	–
Other changes	(17)	–	(2)	–	(19)
Gross carrying value of loans to employees as at 31 December 2018	**93**	1	**4**	–	**98**

During the year ended 31 December 2018, movements in allowances for loans to the NBU's employees were as follows:

	Stage 1	Stage 2	Stage 3	Initially credit-impaired assets	Total
					(in UAH millions)
Allowance for expected credit losses on loans to the NBU's employees as at 1 January 2018	**1**	**1**	**4**	**–**	**6**
Purchased/originated loans	–	–	–	–	–
Transfer to Stage 1	–	–	–	–	–
Transfer to Stage 2	–	–	–	–	–
Transfer to Stage 3	–	–	–	–	–
Derecognized or repaid loans	–	–	–	–	–
Assets written off against allowances	–	–	–	–	–
Adjustment of interest income	–	–	(1)	–	(1)
Change in parameters/models used for calculating allowances and their partial repayment	–	–	–	–	–
Allowance for expected credit losses on loans to the NBU's employees as at 31 December 2018	**1**	**1**	**3**	**–**	**5**

During the year ended 31 December 2018, movements in gross carrying value of financial accounts receivable were as follows:

	Total
	(in UAH millions)
Gross carrying value of financial accounts receivable as at 1 January 2018	813
Accounts receivable initially recognized during the reporting period	111
Derecognized accounts receivable	(640)
Assets written off against allowances	–
Other changes	(37)
Gross carrying value of financial accounts receivable as at 31 December 2018	247

During the year ended 31 December 2018, movements in allowances for expected credit losses on financial accounts receivable were as follows:

	Total
	(in UAH millions)
Allowance for expected credit losses on accounts receivable as at 1 January 2018	4
Accounts receivable initially recognized during the reporting period	3
Derecognized accounts receivable	–
Change in parameters/models used for calculating estimated credit losses	–
Assets written off against allowances	–
Recovery of losses	–
Other changes	–
Allowance for expected credit losses on accounts receivable as at 31 December 2018	7

Other financial assets are analyzed by geographical concentration risk in Note 27, by credit risk – in Note 28, by foreign currency risk – in Note 29, by interest rate risk – in Note 30, and by liquidity risk – in Note 31.

13 Accounts of Banks

	2018	2017
		(in UAH millions)
Correspondent accounts:		
Denominated in the national currency	**35,662**	37,489
Denominated in foreign currencies	**16**	77
Term deposits:		
Denominated in foreign currencies	**41**	–
Accounts of banks on specific use terms:		
Denominated in the national currency	**2,178**	1,778
Denominated in foreign currencies	**612**	650
Total accounts of banks	**38,509**	39,994

Term deposits in foreign currencies are represented by accounts of banks in foreign currencies received as collateral under refinancing loans.

Obligatory reserves are accounted for on correspondent accounts of banks with the NBU in the national currency (2017: on correspondent accounts in the national currency). As at 31 December 2018, obligatory reserves were calculated on the basis of a simple average over a period of the provision base determination and had to be maintained at the level of 3%–6.5% of certain obligations of banks (31 December 2017: 3%–6.5%).

As at 31 December 2018 and 2017, in accordance with the NBU's regulations, banks had to provide and hold their obligatory reserves on their correspondent accounts with the NBU. In addition, according to legal acts of the National Bank, it is granted the right to set the amount of obligatory reserves for banks, which kept balances at the correspondent account at the beginning of the operational day. This amount is established for the period of maintenance of obligatory reserves in percentage terms to the reserve base, which is calculated during the determination period.

As at 31 December 2018 and 2017, no interest was accrued on the balances that create obligatory reserves on the correspondent accounts.

As at 31 December 2018 and 2017, no transfers were envisaged by banks to cover statutory provisions for any assets.

Accounts of banks on special use terms as at 31 December 2018 and 2017 included the funds placed for the purposes of statutory capital increase, the accounts for making settlements by liquidation committees of banks in the process of their liquidation, and the accounts opened for other purposes specified by the laws of Ukraine and the NBU's regulations.

As at 31 December 2018 and 2017, all accounts of banks were maturing within 12 months.

Accounts of banks are analyzed by geographical concentration risk in Note 27, by foreign currency risk – in Note 29, by interest rate risk – in Note 30, and by liquidity risk – in Note 31.

14 Accounts of Government and Other Institutions

	2018	2017
		(in UAH millions)
Funds of budgets and budget entities	**40,417**	52,260
Household Deposit Guarantee Fund	**7,082**	3,740
Other	**228**	124
Total accounts of government and other institutions	**47,727**	56,124

The NBU services the accounts of the State Budget of Ukraine and local budgets that are consolidated on one 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 Household Deposit Guarantee Fund which bore interest at the rate of 4.00% as at 31 December 2018 (31 December 2017: 4.83%).

As at 31 December 2018 and 2017, 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 27, by foreign currency risk – in Note 29, by interest rate risk – in Note 30, and by liquidity risk – in Note 31.

15 Certificates of Deposit Issued by the National Bank of Ukraine

Certificates of deposit issued by the NBU represent one of its monetary policy instruments. This is a debt security issued by the NBU in a non-documentary form evidencing the placement of banks' funds with the NBU and the right of banks to receive on maturity the funds placed, together with the interest accrued. Yield on the certificates of deposit is set by the NBU individually for each placement based on the current objectives of monetary policies.

In 2018 and 2017, transactions on placements of certificates of deposit were performed under agreements with banks for the period of one day (overnight deposits) and up to 100 days.

As at 31 December 2018, the nominal value of certificates of deposit issued by the NBU was UAH 1 million each, with the initial period of placement from 5 to 14 days and the weighted average yield of 17.03% per annum (31 December 2017: the weighted average yield of 13.40% per annum and the initial period of placement from 5 to 91 days). The weighted average interest rate for certificates of deposit placed in 2018 was 15.64% per annum, and the initial period of placement varied from 1 to 91 days (2017: the weighted average yield of 12.13% per annum and the initial period of placement varied from 1 to 91 days).

As at 31 December 2018 and 2017, all certificates of deposit issued by the NBU were maturing within 12 months.

Certificates of deposit are analyzed by geographical concentration risk in Note 27, by foreign currency risk – in Note 29, by interest rate risk – in Note 30, and by liquidity risk – in Note 31.

16 Borrowings Received

As at 31 December 2018, the National Bank of Ukraine used the funds in the amount of USD 100 million (UAH 2,769 million) received within the bilateral loan agreement between the National Bank of Ukraine and the National Bank of Switzerland (31 December 2017: USD 100 million (UAH 2,807 million)).

Borrowings received are analyzed by geographical concentration risk in Note 27, by foreign currency risk – in Note 29, by interest rate risk – in Note 30, and by liquidity risk – in Note 31.

17 Liabilities to the IMF

	2018	2017
		(in UAH millions)
Liabilities to the IMF on SDR purchases	**214,155**	202,986
Liabilities to the IMF on SDR allocations	**3,142**	3,259
IMF Account No. 2	**3**	–
Liabilities to the IMF, except for quota contributions	**217,300**	206,245
Liabilities to the IMF in respect of quota settlement	**77,268**	80,210
IMF Account No. 1	**194**	201
Liabilities to the IMF in respect of quota contributions	**77,462**	80,411
Total liabilities to the IMF	**294,762**	286,656

Liabilities to the IMF in respect of SDR allocation represent the funds received by the NBU in respect of special SDR allocation.

Liabilities to the IMF in respect of purchases of SDR represent the loans received from the IMF by the NBU. During 2018, liabilities to the IMF increased at the cost of proceeds from the IMF in the amount of SDR 1,000 million (UAH 38,309 million at the official exchange rate at the date of the transaction, or UAH 37,720 million at the IMF's annual exchange rate) (2017: liabilities to the IMF increased at the cost of proceeds from the IMF in the amount of SDR 734 million (UAH 27,062 million at the official exchange rate at the date of the transaction, or UAH 26,204 million at the IMF's annual exchange rate)) (Note 7).

IMF account No. 1 is the IMF account with the NBU in the national currency that is used for transactions with the IMF related to utilization and repayment of IMF loans. IMF account No. 2 is the IMF account with the NBU in the national currency that is used by the IMF for receipts and administrative disbursements in UAH in the territory of Ukraine.

Liabilities to the IMF in respect of quota contributions represent the liabilities in respect of quota settlement. In 2018, liabilities to the IMF in respect of quota contributions decreased by UAH 5.6 million due to the need to replenish IMF account No. 1 and by UAH 2.6 million due to administrative payments made by the IMF in UAH, which resulted in a respective increase in the IMF's reserve position by the amount of SDR 137,353 (2017: liabilities to the IMF in respect of quota contributions decreased by UAH 3 million due to administrative payments made by the IMF in UAH, which resulted in a respective increase in the IMF's reserve position by the amount of SDR 82,412).

During 2018 and 2017, no changes occurred in the quota with the IMF (Note 10).

During 2018, liabilities to the IMF were repaid for the amount of SDR 516 million (UAH 19,989 million at the official exchange rate at the transaction date, or UAH 19,306 million at the annual exchange rate of the IMF) (2017: liabilities to the IMF were repaid for the amount of SDR 225 million (UAH 8,412 million at the official exchange rate at the transaction date, or UAH 8,194 million at the annual exchange rate of the IMF)) (Note 7).

All liabilities to the IMF are non-current, except for balances on IMF accounts No. 1 and No. 2, the liability to the IMF in respect of SDR allocation, and liabilities to the IMF under the borrowing in the amount of SDR 427 million (UAH 16,113 million at the IMF's annual exchange) and interest accrued on liabilities to the IMF (2017: SDR 516 million (UAH 18,796 million at the IMF's annual exchange) and interest accrued on liabilities to the IMF).

Liabilities to the IMF are analyzed by geographical concentration risk in Note 27, by foreign currency risk – in Note 29, by interest rate risk – in Note 30, and by liquidity risk – in Note 31.

18 Other Liabilities

	2018	2017
		(in UAH millions)
Other financial liabilities		
Provision for staff costs	**373**	382
Accounts payable	**200**	76
Other	**1**	–
Total other financial liabilities	**574**	458
Other non-financial liabilities		
Provision for contingent liabilities	**633**	2,840
Accounts payable on taxes	**13**	9
Deferred income	**1**	1
Total other non-financial liabilities	**647**	2,850
Total other liabilities	**1,221**	3,308

Provisions for contingent liabilities comprise the allowances created for:

- loss of cash stored in cash reserves, currency handling offices, and automated telling machines of the NBU's offices in Donetsk and Luhansk oblasts, considering the situation as a result of their temporary occupation, which, as at 31 December 2018 and 2017, amounted to UAH 215 million
- under legal or constructive obligations (as a result of past events), in particular, under lawsuits, settlement of which will most probably result in an outflow of resources embodying economic benefits (a negative outcome is more expected than not), and their amount (expense) can be measured reliably, which, as at 31 December 2018, amounted to UAH 418 million (31 December 2017: UAH 2,625 million).

Other financial liabilities are analyzed by geographical concentration risk in Note 27, by foreign currency risk – in Note 29, by interest rate risk – in Note 30, and by liquidity risk – in Note 31.

19 Liabilities on Profit Distribution to the State Budget of Ukraine

The NBU determines distributable profit in accordance with Article 5 of the Law of Ukraine *On the National Bank of Ukraine*. A part in distributable profit that is payable to the State Budget of Ukraine shall be transferred in the year following the reporting year upon confirmation by an external auditor and approval by the NBU Council of the annual financial statements.

In accordance with the Law of Ukraine *On the National Bank of Ukraine*, the NBU is not entitled to transfer to the State Budget of Ukraine the amount 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. Correspondingly, total funds transferred by the NBU in 2018 to the State Budget of Ukraine amounted to UAH 44,614 million (2017: UAH 44,379 million). The transfers were made in seven payments in the period from April to August in accordance with the schedule agreed with the Ministry of Finance of Ukraine.

Liabilities on profit distribution to the State Budget of Ukraine, as determined by the Law of Ukraine *On the National Bank of Ukraine*, are presented in the calculation below:

	2018	2017
		(in UAH millions)
Profit for the year attributable to the National Bank of Ukraine per the consolidated statement of comprehensive income	**37,810**	62,290
Adjustment to reflect a (positive)/negative result of subsidiaries' operations	**(30)**	(6)
Profit of the NBU for the year	**37,780**	62,284
Release/accrual of allowance for unrealized loss/gain on revaluation of financial assets and liabilities in foreign currency and monetary gold	9,271	(18,626)
Accrual/release of allowance for re-measurement of unrealized loss/gain on revaluation of debt securities to fair value	(1,617)	(412)
Accrual/release of allowance for unrealized loss/gain on revaluation of financial instruments, other than debt securities, to fair value	(40)	(286)
Realized revaluation result on transactions with disposed securities and derivatives	530	398
Realized result on disposed investment metals	181	239
Reversal of other reserves and result of free-of-charge transfer of assets	326	2,331
Distributable profit for the year	**46,431**	45,928
Result of IFRS 9 implementation	**22**	–
Impact of change in accounting policy on determination of unrealized and realized results for foreign currencies, monetary gold and banking metals	**22,011**	–
Total distributable profit	**68,464**	45,928
General reserves created	**(3,566)**	(1,314)
Liabilities on profit distribution to the State Budget of Ukraine	**64,898**	44,614

As at 31 December 2018, profits distributable amounted to UAH 68,464 million, of which UAH 46,431 million referred to profits distributable for 2018, UAH 22,011 million – to transformation adjustments for the period of 2012–2017 that had arisen as a result of change in accounting policy and implementation of the new Procedure for Determining Unrealized and Realized Revaluation Results (Note 2), and UAH 22 million – to the effect of IFRS 9 implementation.

To increase general reserves to the level of 10% of total volume of the NBU's liabilities, as at 31 December 2018, the NBU should transfer UAH 3,566 million. This amount was included in retained earnings for 2018. Another part of profits distributable for 2018 in the amount of UAH 64,898 million was recognized as liabilities on profit distribution to the State Budget of Ukraine.

20 Capital Management

The function of the NBU's capital is to ensure economic independence and ability to perform the functions established by law. Total amount of the capital managed by the NBU as at 31 December 2018 amounted to UAH 137,465 million (31 December 2017: UAH 164,893 million). No external capital requirements exist for the NBU as a central bank, except for the size of the statutory capital stipulated by the Law of Ukraine *On the National Bank of Ukraine*.

In accordance with the Law of Ukraine *On the National Bank of Ukraine*, the amount of statutory capital of the NBU should be UAH 10 million. The amount of statutory capital was increased to UAH 100 million based on the decision of the NBU's Council regarding the results for the year ended 31 December 2007.

In accordance with the Law of Ukraine *On the National Bank of Ukraine*, general reserves should amount to 10% of all monetary obligations, i.e. all liabilities of the National Bank of Ukraine, except for liabilities to the Cabinet of Ministers of Ukraine and international financial organizations. During 2018, retained earnings were reduced by the amount of UAH 1,314 million directed to general reserves in order to bring them to the level of 10% of total monetary liabilities as at 31 December 2017. As at 31 December 2018 retained earnings in the amount of UAH 3,566 million should be transferred to increase general reserves upon approval by the NBU's Council of the NBU's annual financial statements.

Other reserves in equity shall be created to finance the NBU's investments and released as a result of reduction of the carrying value or disposal of assets. Considering the processes of centralization and release from non-core functions, the carrying value of assets provided by other reserves decreased in 2018. A negative result of operations on disposal of assets due to their free-of-charge transfer to government authorities in the amount of UAH 232 million was included in retained earnings. A source for covering the negative result was the release of other reserves by the same amount. Within the framework of annual updates, other reserves were released by the amount of UAH 326 million, through the reduction of their carrying value as a result of amortization and other factors. In 2018, total amount of reduction in other reserves was UAH 558 million.

Revaluation reserves decreased mainly due to changes in the accounting policies on calculating realized and unrealized results on operations in foreign currency, monetary gold, and investment metals in the amount of UAH 22,011 million.

The composition of the NBU's equity as at 31 December 2018 was presented as follows:

	2018	2017
		(in UAH millions)
Statutory capital	**100**	100
General reserves	**47,251**	45,937
Other reserves	**5,243**	5,802
Retained earnings	**3,597**	1,314
Provision for revaluation of foreign currency, monetary gold	**78,560**	109,057
Provision for revaluation of investment metals	**625**	1,690
Provisions for revaluation of financial instruments to their fair values	**2,089**	993
Total equity	**137,465**	164,893

21 Cash and Cash Equivalents

	2018	2017
		(in UAH millions)
Foreign currency cash	**1,816**	1,941
Demand deposits (other than restricted cash)	**41,423**	11,577
Short-term deposits with maturities up to three months (other than gold, investment metals, and restricted funds)	**73,179**	10,212
Foreign securities with maturities up to three months	**22,725**	50,456
SDR holdings	**98**	60,784
Total cash and cash equivalents	**139,241**	134,970

22 Interest Income and Expense

	2018	2017
		(in UAH millions)
Interest income		
Income on domestic securities measured at amortized cost	**42,980**	46,196
Income on loans to banks and other borrowers	**3,739**	6,629
Income on funds and deposits in foreign currency	**794**	319
Income on SDR holdings	**219**	387
Income on internal state debt	**157**	179
Other	**12**	7
Total interest income	**47,901**	53,717
Interest expense		
Expense on certificates of deposit issued by the NBU	**(7,473)**	(6,366)
Expense on operations with the IMF	**(5,687)**	(5,036)
Expenses on accounts of the Household Deposit Guarantee Fund	**(216)**	(141)
Expense on borrowings received	**(134)**	(88)
Total interest expense	**(13,510)**	(11,631)
Net interest income	**34,391**	42,086

Included in interest income was interest income on loans to employees.

In 2018, income on domestic securities measured at amortized cost include income on inflation government bonds in the amount UAH 19,730 million (in 2017 – UAH 3,571 million).

In 2018, income on loans to banks and other borrowers included income on impaired loans in the amount of UAH 2,811 million (2017: UAH 5,330 million), less the effect of adjusting the interest income on impaired loans to banks in the amount of UAH 1,121 million (2017: UAH 2,576 million) (Note 9).

23 Other Income

	2018	2017
		(in UAH millions)
Income on sale of investment and commemorative coins, souvenirs and other products	**1,013**	1,028
Excess of payments under debt securities over their fair values	–	87
Other	**6**	137
Total other income	**1,019**	1,252

24 Staff Costs

	2018	2017
		(in UAH millions)
Payroll of staff	**1,165**	1,082
Single contribution for mandatory state social security and contributions to non-state pension funds	**282**	247
Financial aid and other social benefits	**5**	2
Other	**7**	36
Total staff costs	**1,459**	1,367

Included in other staff costs were staff training and development costs, expenditures to voluntary medical insurance of employees, etc.

25 Administrative and other expenses

	2018	2017
		(in UAH millions)
Consulting and legal services	**298**	444
Depreciation and amortization	**237**	262
Utilities and household expenses	**163**	155
Expenses on maintenance of non-current tangible and intangible assets	**130**	142
Taxes, duties, and charges	**64**	108
Business trips	**28**	20
Telecommunication services and maintenance	**23**	29
Other	**94**	99
Total administrative and other expenses	**1,037**	1,259

Depreciation and amortization charges for 2018 excluded depreciation in the amount of UAH 241 million (2017: UAH 228 million) in respect of property and equipment used in the production of banknote paper, banknotes, coins, and other products. This portion of depreciation and amortization charges was included in the costs related to production of banknotes, coins, and other products.

Other expenses included costs related to the financial aid paid for training of students, remuneration to members of the NBU's Council, cost of sales of the services of the sewage treatment facilities of the Banknote Paper Mill, etc.

26 Financial Risk Management

An objective for managing the NBU's financial risks is to limit potential losses of the NBU's financial assets, ensure for timely fulfillment of its obligations, and protect its capital in order to achieve strategic goals and effective performance of the NBU's functions specified by the Law of Ukraine *On the National Bank of Ukraine*, support the institutional capability and independence.

Processes for managing financial risks include the following stages:

1) arrange a system of financial risk management

2) identify adverse events/financial risks in the NBU's processes/products

3) assess financial risks

4) determine and undertake measures in response to financial risks (address financial risks)

5) perform controls

6) communicate and report

7) monitor the financial risk management system.

Stages of financial risk management processes are described in detail in the process procedures and other regulations of the NBU on the issues of managing financial risks.

The NBU's Board is responsible for implementing the risk management system and ensuring the NBU's risk management processes.

In accordance with the Law of Ukraine *On the National Bank of Ukraine*, the NBU's Board has established the Assets and Liabilities Management Committee of the National Bank to which the powers are delegated to make decisions on the issues of asset and liability management, including international reserves, ensure for monitoring of risks and financial performance of operations with assets and liabilities of the National Bank of Ukraine.

The NBU's Board or the Assets and Liabilities Management Committee, within the competences delegated to it by the NBU's Board, shall select and approve measures in response to financial risks (to address financial risks) in accordance with proposals from operational units that dealing with financial instruments and the Risk Management Department by taking decisions on the issues of managing financial risks and/or incorporating those measures to regulatory and/or executive acts of the NBU.

The NBU's units responsible for conducting and/or performing operations with financial instruments make up the first line of defense in the financial risk management processes and are responsible for identifying, measuring financial risks, determining and undertaking measures in response to financial risks, and reporting on the financial risks related to the operations that are in the area of responsibilities of those units.

Managing financial risks by the Risk Management Department is the "second line of defense" in the financial risk management processes, and it is responsible for:

1) providing methodological, coordinating, and organizational support to the NBU's financial risk management processes, including the update of the financial risk management policy

2) developing and supporting the procedures and methodologies used in assessing financial risks

3) controlling, monitoring, and ensuring independent analyses at the level of the NBU's second line of defense

4) analyzing, upon request, new operations with financial instruments, new financial instruments, changes to operations with financial instruments in the context of their effect on the NBU's financial risks, providing recommendations on the measures in response to the financial risks identified (addressing risks)

5) assessing the NBU's financial risk profile

6) reporting on financial risks of the NBU to the NBU's Assets and Liabilities Management Committee.

The NBU's financial risks are divided into the following groups:

- financial risks related to the policies determined and implemented by the NBU that arise from the financial instruments the on-balance or off-balance sheet recognition of which is related to fulfillment by the NBU of its primary function in accordance with Article 6 of the Law of Ukraine *On the National Bank of Ukraine* and other functions specified in Article 7 paragraphs 1–3 of the Law of Ukraine *On the National Bank of Ukraine*
- financial risks related to international (gold and foreign currency) reserves of Ukraine
- other financial risks of the National Bank of Ukraine.

Measures undertaken by the NBU in response to financial risks depend on the NBU's tolerance to a respective risk group.

Key measures undertaken by the NBU in response to financial risks include:

1) avoiding or preventing financial risks through a responsible refusal from operations and financial instruments that expose the NBU to the risks the level of which exceeds the degree of the NBU's tolerance to a respective risk group

2) limiting or mitigating financial risks through:

- diversifying
- setting limits to quantitative risk indicators
- defining conditions and rules for qualitative risk indicators
- applying varied types of collateral in order to make debtors or counterparties meet their obligations and adjusting the fair value of such a collateral, with reference to risk discounts or adjusting ratios

3) transferring financial risks by way of hedging

4) accepting financial risks by creating provisions and covering financial risks at the cost of the NBU's own resources.

Depending on the factors that lead to respective financial risks, the NBU distinguishes credit risk, market risks, and liquidity risk.

Credit Risk

Credit risk is the risk to incur losses or additional expenditures in the event a debtor or counterparty fails to perform its financial obligations to the NBU in accordance with the terms and conditions agreed. Credit risk may have the following manifestation:

risk of default – a credit risk arising from the failure of a counterparty/issuer/debtor to fulfill its obligations to the NBU, including a pre-settlement risk (risk of a counterparty's default before settlements on operations with the NBU) and a settlement risk (risk of a counterparty's default at the day of settlements on operations with the NBU after the NBU fulfills its obligations, but before the counterparty fulfills its obligations), and

risk of a decrease in the counterparty's/issuer's credit rating to the level lower than the minimum acceptable credit rating used for including assets to international (gold and foreign currency) reserves.

Market Risks

Market risks are the risks that the NBU will incur losses or additional expenditures as a result of adverse movements in market prices, e.g., exchange rates, interest rates, prices of financial instruments and commodities, etc. Depending on the factors leading to losses, the NBU singles out the following types of market risks:

Foreign currency risk is the market risk arising from unfavorable changes in foreign currency exchange rates.

Interest rate risk is the market risk arising from unfavorable changes in market interest rates that adversely affect the value of debt securities or other instruments with fixed income and cost of derivative financial instruments (derivatives).

Credit spread risk is the market risk arising from the increase in credit spreads between the yield on maturity of securities or other financial instruments and fixed income and risk-free return on maturity with similar duration that adversely affects the market value of such instruments. The increase in credit spread may relate to both a decrease in credit rating/credit quality of a financial instrument issuer and general movements in the market situation.

Stock risk is the market risk arising from unfavorable changes in the market value of shares and other securities with unfixed income.

Commodity risk is the market risk arising from unfavorable changes in the market value of commodities, including precious metals (e.g., gold).

Volatility risk is the market risk arising from unfavorable changes in the volatility of market prices, interest rates, market indices, and foreign exchange rates that lead to the decreased value of options, including those embedded in other financial instruments.

Among market risks, the most exposure on the NBU is produced by foreign currency and interest rate risks.

The following table summarizes sensitivity of the NBU's positions regarding foreign currency risk estimated on the assumption of 5% increase and decrease in the exchange rates of USD, EUR, SDR, and other currencies against UAH in 2018 and 2017, respectively. The analysis considers only foreign currency denominated amounts (except for non-monetary assets) available at the end of the period in translating of which the rates adjusted by 5% were applied at the end of 2018 and 2017, respectively.

The effect of movements in exchange rates on profit or loss and profits for the year was as follows:

	31 December 2018		31 December 2017	
				(in UAH millions)
	+5%	*-5%*	*+5%*	*-5%*
USD	19,258	(19,258)	15,262	(15,262)
EUR	3,602	(3,602)	2,122	(2,122)
SDR	(10,853)	10,853	(7,229)	7,229
GBP	864	(864)	577	(577)
Other currencies	2,079	(2,079)	1,440	(1,440)

The table below presents the sensitivity analysis to the NBU's positions regarding interest rate risk. The effect on profit or loss and profits for the year was as follows:

	31 December 2018		31 December 2017	
				(in UAH millions)
	+100 bp	*-100 bp*	*+100 bp*	*-100 bp.*
Sensitivity of financial assets	3,955	(3,955)	3,566	(3,566)
Sensitivity of financial liabilities	(2,757)	2,757	(2,666)	2,666
Net impact on profit or loss and distributable profit	1,198	(1,198)	900	(900)

Sources of interest rate risk are identified through the analysis of the existing structure of interest-bearing assets and liabilities. The NBU assesses interest rate risk by analyzing the sensitivity to fluctuations in interest rates, 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 methodology, the scenarios applied include a parallel shift of the whole curve by 1 percentage point (+/-100 basis points). The sensitivity of interest rate risk is estimated based on the scenario according to which all interest rate curves are treated as the ones changing in identical fashion irrespective of a financial instrument or currency. Estimates include the interest rate risk by all positions of the NBU for instruments with fixed and fluctuating interest rates as defined by a respective model.

Liquidity Risk

By its character, the NBU divides the liquidity risk to:

liquidity risk of international (gold and foreign currency) reserves of Ukraine which is displayed in potential difficulties encountered in quick sale or early termination of large volumes of assets in which international (gold and foreign currency) reserves of Ukraine are placed, even under unfavorable market conditions that lead to reduction in prices for such assets, and

the NBU's liquidity risk in foreign currency which is displayed in the NBU's inability to fulfill its foreign currency denominated obligations within specified terms.

Due to the fact that, according to Article 7 paragraph 2 of the Law of Ukraine *On the National Bank of Ukraine*, the NBU is an exclusive issuer of the national currency of Ukraine and is responsible for arranging cash circulation, the NBU is not exposed to liquidity risk in the national currency of Ukraine, i.e. the risk of failure to fulfill its obligations in the national currency of Ukraine within specified terms.

The NBU manages its liquidity risk by:

maintaining certain regulatory levels of reserve assets in the form of cash on the NBU's correspondent accounts

maintaining the sufficient amount of highly liquid financial instruments that can be easily translated to cash

setting liquidity requirements to the NBU's assets placed in international (gold and foreign currency) reserves of Ukraine.

A detailed analysis of exposures to the above financial risks is disclosed in Notes from 27 to 31.

27 Analysis of Financial Assets and Liabilities by Geographical Concentration Risk

As at 31 December 2018, a geographical concentration risk analysis of the NBU's financial assets and liabilities was as follows:

	Ukraine	OECD countries	IMF	Other	Total
					(in UAH millions)
Financial assets					
Funds and deposits in foreign currencies	1,816	114,753	–	112	**116,681**
Foreign securities	–	345,277	–	87,714	**432,991**
SDR holdings	–	–	100	–	**100**
Domestic securities	361,436	–	–	–	**361,436**
Loans to banks and other borrowers	22,145	–	–	–	**22,145**
Internal state debt	1,834	–	–	–	**1,834**
IMF quota contributions	–	–	77,472	–	**77,472**
Other financial assets	214	–	132	–	**346**
Total financial assets	**387,445**	**460,030**	**77,704**	**87,826**	**1,013,005**
Financial liabilities					
Banknotes and coins in circulation	400,119	–	–	–	**400,119**
Accounts of banks	38,508	–	–	1	**38,509**
Accounts of government and other institutions	47,726	1	–	–	**47,727**
Certificates of deposit issued by the NBU	61,867	–	–	–	**61,867**
Borrowings received	–	2,769	–	–	**2,769**
Liabilities to the IMF except for quota contributions	–	–	217,300	–	**217,300**
Liabilities to the IMF in respect of quota contributions	–	–	77,462	–	**77,462**
Other financial liabilities	551	23	–	–	**574**
Total financial liabilities	**548,771**	**2,793**	**294,762**	**1**	**846,327**
Net balance sheet position	**(161,326)**	**457,237**	**(217,058)**	**87,825**	**166,678**

As at 31 December 2017, a geographical concentration risk analysis of the NBU's financial assets and liabilities was as follows:

	Ukraine	OECD countries	IMF	Other	Total
					(in UAH millions)
Financial assets					
Funds and deposits in foreign currencies	1,941	21,859	–	–	**23,800**
Foreign securities	–	362,725	–	51,730	**414,455**
SDR holdings	–	–	60,860	–	**60,860**
Domestic securities	372,697	–	–	–	**372,697**
Loans to banks and other borrowers	32,417	–	–	–	**32,417**
Internal state debt	1,926	–	–	–	**1,926**
IMF quota contributions	–	–	80,415	–	**80,415**
Other financial assets	145	–	800	–	**945**
Total financial assets	**409,126**	**384,584**	**142,075**	**51,730**	**987,515**
Financial liabilities					
Banknotes and coins in circulation	361,544	–	–	–	**361,544**
Accounts of banks	39,994	–	–	–	**39,994**
Accounts of government and other institutions	56,123	1	–	–	**56,124**
Certificates of deposit issued by the NBU	67,024	–	–	–	**67,024**
Borrowings received	–	2,807	–	–	**2,807**
Liabilities to the IMF except for quota contributions	–	–	206,245	–	**206,245**
Liabilities to the IMF in respect of quota contributions	–	–	80,411	–	**80,411**
Other financial liabilities	421	37	–	–	**458**
Total financial liabilities	**525,106**	**2,845**	**286,656**	**–**	**814,607**
Net balance sheet position	**(115,980)**	**381,739**	**(144,581)**	**51,730**	**172,908**

28 Credit Risk

The following information provides gross carrying amounts of the NBU's financial assets are assessed by impairment stages and credit ratings of counterparties as assigned by international rating agencies of Fitch Ratings, Moody's, and Standard & Poor's. The following disclosures as at 31 December 2018 and 2017 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 consolidated financial statements for the year ended 31 December 2017 used for each counterparty the lowest of the ratings assigned by the above agencies. In these consolidated financial statements, the presentation as at 31 December 2017 was modified accordingly.

The following information is provided as at 31 December 2018:

	Credit rating	Total	% in financial assets	Stage 1	Stage 2	Stage 3	Initially credit-impaired assets
							(in UAH millions)
Funds and deposits in foreign currencies:							
Demand deposits	AAA	27,096	23.2	27,096	–	–	–
	AA+	9	0.0	9	–	–	–
	AA	856	0.7	856	–	–	–
	AA-	2	0.0	2	–	–	–
	A+	9,818	8.4	9,818	–	–	–
	A	3,821	3.3	3,821	–	–	–
Term deposits	AAA	9,986	8.6	9,986	–	–	–
	AA+	5,349	4.6	5,349	–	–	–
	AA-	1,901	1.6	1,901	–	–	–
	A+	29,933	25.6	29,933	–	–	–
	A	26,119	22.4	26,119			
Foreign currency cash	Riskless	1,816	1.6	1,816	–	–	–
Total funds and deposits in foreign currencies:		116,706	100.0	116,706	–	–	–
Foreign securities:							
Government bonds	AAA	180,840	41.8	180,840	–	–	–
	AA+	5,941	1.4	5,941	–	–	–
	AA	4,491	1.0	4,491	–	–	–
	AA-	3,167	0.7	3,167	–	–	–
	A+	1,349	0.3	1,349	–	–	–
Bonds of international agencies, banks, and other issuers	AAA	37,402	8.6	37,402	–	–	–
	AA+	11,662	2.7	11,662	–	–	–
	AA	15,178	3.5	15,178	–	–	–
	AA-	24,127	5.6	24,127	–	–	–
	A+	80,656	18.6	80,656	–	–	–
	A	64,591	14.9	64,591	–	–	–
	A-	3,466	0.9	3,466	–	–	–
Total foreign debt securities		**432,870**	**100.0**	**432,870**	–	–	–
Domestic securities	**B-**	361,436	100.0	361,436	–	–	–
Total domestic securities		**361,436**	**100.0**	**361,436**	**–**	**–**	**–**
Loans to banks and other borrowers:							
Loans to banks	B-	9,810	15.5	–	–	9,810	–
	Not rated	51,788	82.1	4,302	–	47,486	–
Loans to the Household Deposit Guarantee Fund	Not rated	1,458	2.3	1,458	–	–	–
Loans to other borrowers	Not rated	38	0.1	–	–	38	–
Total loans to banks and other borrowers		**63,094**	**100.0**	**5,760**	**–**	**57,334**	**–**
Internal state debt	B-	**1,834**	**100.0**	**1,834**	–	–	–
Other financial assets	AAA	132	36.9	132	–	–	–
	Not rated	226	63.1	221	1	4	–
Total other financial assets		**358**	**100.0**	**353**	**1**	**4**	**–**

The following information is provided as at 1 January 2018:

	Credit rating	Total	% in financial assets	Stage 1	Stage 2	Stage 3	Initially credit-impaired assets
							(in UAH millions)
Funds and deposits in foreign currencies :							
Demand deposits	AAA	7,740	32.5	7,740	–	–	–
	AA+	8	0.0	8	–	–	–
	AA	44	0.2	44	–	–	–
	AA-	2,258	9.5	2,258	–	–	–
	A+	1,522	6.4	1,522	–	–	–
	A	45	0.2	45	–	–	–
	A-	25	0.1	25			
Term deposits	AAA	2,146	9.0	2,146	–	–	–
	AA+	679	2.9	679	–	–	–
	AA-	1,535	6.4	1,535	–	–	–
	A	5,857	24.6	5,857	–	–	–
Foreign currency cash	Riskless	1,941	8.2	1,941	–	–	–
Total funds and deposits in foreign currencies:		**23,800**	**100.0**	**23,800**	**–**	**–**	**–**
Foreign securities:							
Government bonds	AAA	171,078	41.3	171,078	–	–	–
	AA+	10,551	2.5	10,551	–	–	–
	AA	6,050	1.5	6,050	–	–	–
	AA-	3,051	0.7	3,051	–	–	–
	A+	1,391	0.3	1,391	–	–	–
Bonds of international agencies, banks, and other issuers	AAA	70,204	16.9	70,204	–	–	–
	AA+	8,629	2.1	8,629	–	–	–
	AA	6,818	1.6	6,818	–	–	–
	AA-	13,574	3.3	13,574	–	–	–
	A+	52,660	12.7	52,660	–	–	–
	A	66,624	16.1	66,624	–	–	–
	A-	3,704	1.0	3,704	–	–	–
Total foreign debt securities		**414,334**	**100.0**	**414,334**		**–**	**–**
Domestic securities	B-	371,743	99.7	371,743	–	–	–
	Not rated	954	0.3	954	–	–	
Total domestic securities		**372,697**	**100.0**	**372,697**	**–**	**–**	**–**
Loans to banks and other borrowers:							
Loans to banks	B-	624	0.8	624	–	–	–
	CCC+	12,392	16.5	–	–	10,886	1,506
	CCC	4,995	6.7	4,995	–	–	–
	Not rated	50,557	67.3	430	–	50,127	–
Loans to the Household Deposit Guarantee Fund	Not rated	6,479	8.6	6,479	–	–	–
Loans to other borrowers	Not rated	38	0.05		–	38	–
Total loans to banks and other borrowers		**75,085**	**100.0**	**12,528**	**–**	**61,051**	**1,506**
Internal state debt	B-	**1,926**	**100.0**	**1,926**	**–**	**–**	**–**
Other financial assets	AAA	798	83.4	798	–	–	–
	CCC	2	0.2	2	–	–	–
	Not rated	157	16.4	150	1	6	–
Total other financial assets		**957**	**100.0**	**950**	**1**	**6**	**–**

Loans granted to banks to support their liquidity that do not have international ratings assigned include the loans to domestic banks to support their liquidity the ratings of which are determined in accordance with the internal methodology of the NBU.

As at 31 December 2018, the gross carrying value balance in the amount of UAH 4,302 million had the internal rating of BBB, and UAH 1 million had the internal rating of CCC. As at 31 December 2017, the gross carrying value balance in the amount of UAH 430 million had the internal rating of BBB.

AAA rating is the highest grade of a counterparty's credit ability. 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 interest and principal on debt obligations is very high.

BBB rating is a medium grade of a counterparty's credit ability. 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 non-payment compared to counterparties with higher ratings. However, difficulties may arise with timely and full repayment of interest and principal on debt obligations in the event of occurrence of unfavorable changes in commercial, financial, and economic conditions, though, in the nearest future, a probability of the counterparty's failure to meet its debt obligations is treated as low.

BB rating is a medium grade of a counterparty's credit ability. 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, 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 lower than medium grade of a counterparty's credit ability. 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 credit ability. 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 credit ability. Key indicators of the counterparty's financial position are assessed as satisfactory, but their deterioration in a short-term 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 credit ability, 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 at 31 December 2018 amounted to UAH 42,048 million (31 December 2017: UAH 46,660 million), or 67% (31 December 2017: 62%) of total loans to banks and other borrowers, before allowance. The allowance recognized on the loans granted to five banks amounted to UAH 28,002 million as at 31 December 2018 (31 December 2017: UAH 29,189 million).

Summarized below is information on net credit risk by types of collateral received as at 31 December 2018:

	Maximum credit risk exposure	Cost of collateral accepted as security	Net credit risk (loans to banks)	Net credit risk (internal state debt)
Loans secured by:				–
Real estate	13,669	30,669	13,604	–
Securities	5,696	7,014	–	–
Other types of collateral	2,780	4,409	2,776	–
Unsecured loans	1,834	–	–	1,834
Total loans to banks and other borrowers	**23,979**	**42,092**	**16,380**	**1,834**

Summarized below is information on net credit risk by types of collateral received as at 31 December 2017:

	Maximum credit risk exposure	Cost of collateral accepted as security	Net credit risk (loans to banks)	Net credit risk (internal state debt)
Loans secured by:				
Real estate	15,436	34,386	15,241	–
Securities	15,096	20,938	2,762	–
Other types of collateral	1,885	4,215	1,885	–
Unsecured loans	1,926	–	–	1,926
Total loans to banks and other borrowers	**34,343**	**59,539**	**19,888**	**1,926**

As at 31 December 2018 and 2017 there is no credit risk exposure under loans to Household Deposit Guarantee Fund and other borrowers.

Maximum exposure of credit risk is represented by the carrying amounts of loans due at the reporting date. Collateral accepted as security is the fair value of collateral accepted by the NBU at the moment of creating provisions at the reporting date.

The following information summarizes loans before allowance by collateral types as at 31 December 2018:

	Loans to banks to support their liquidity	Loans under credit lines to support small and medium entities at the cost of the funds from the European Bank for Reconstruction and Development	Loans to the Household Deposit Guarantee Fund and other borrowers	Internal state debt	Total
					(in UAH millions)
Loans secured by:					
Real estate	17,893	–	–	–	**17,893**
Securities	4,238	–	1,458	–	**5,696**
Property rights on loan agreements	2,636	–	–	–	**2,636**
Other types of collateral	1,042	–	–	–	**1,042**
Unsecured loans	35,789	36	2	1,834	**37,661**
Total loans to banks and other borrowers	**61,598**	**36**	**1,460**	**1,834**	**64,928**

The following information summarizes loans before allowance by collateral types as at 31 December 2017:

	Loans to banks to support their liquidity	Loans under credit lines to support small and medium entities at the cost of the funds from the European Bank for Reconstruction and Development	Loans to the Household Deposit Guarantee Fund and other borrowers	Internal state debt	Total
					(in UAH millions)
Loans secured by:					
Real estate	19,572	–	–	–	**19,572**
Securities	9,130	–	6,479	–	**15,609**
Property rights on loan agreements	2,009		–	–	**2,009**
Other types of collateral	1,108	–	–	–	**1,108**
Unsecured loans	36,749	36	2	**1,926**	**38,713**
Total loans to banks and other borrowers	**68,568**	**36**	**6,481**	**1,926**	**77,011**

The NBU conducts operations on refinancing banks by granting them overnight and refinancing loans and had outstanding amounts due on such loans as at 31 December 2018 and 2017. The NBU grants to banks overnight and refinancing loans that are provided by a pool to include the following types of assets (property): government bonds, certificates of deposit issued by the NBU, bonds of international financial organizations (issued in accordance with the legislation of Ukraine), and foreign currencies (USD, EUR, GBP, CHF, JPY).

To secure for fulfillment of obligations under the stabilization loans granted to banks to support their liquidity before 2017 and which remained outstanding as at 31 December 2018 and 2017, the NBU accepted securities (domestic bonds, corporate bonds, including those provided by the guarantee of the Cabinet of Ministers of Ukraine), foreign currency, shareholdings of banks' majority owners, real estate, and property rights under loan agreements. Effective from 2017, the NBU has ceased to grant stabilization loans. Instead of stabilization loans, the NBU may grant to banks loans of urgent liquidity support, but no such loans to banks have been granted yet.

For the banks and other borrowers estimated at Stage 3 of impairment the cash flows from which are expected to be received only upon the sale of collateral, net credit risk is equal to the maximum exposure of credit risk.

For the banks and other borrowers estimated at Stages 1 and 2 of impairment, net credit risk is calculated as the difference between the maximum credit risk exposure and cost of the collateral accepted to secure for assets.

For all groups of assets, the NBU determines default as inability or reluctance of a counterparty/issuer/borrower to fulfill its financial liabilities to the NBU, which leads to direct financial losses from credit risk exposure. A default event on liabilities to the NBU is recognized, in particular, on outstanding financial assets which, at the reporting date, have at least one past due payment over than 90 calendar days.

For the purpose of creating allowances for financial instruments within the general approach, the NBU uses a model of expected credit losses a key element of which is reflecting on a timely basis deterioration or improvement of credit quality of financial instruments, with reference to the effect of current and forward-looking information. Volume of expected credit losses depends on the degree of decrease in credit quality from initial recognition of the financial instrument.

The NBU recognizes credit losses as the difference between all cash flows payable by a counterparty/issuer/borrower under contractual terms and all cash flows the NBU expects to receive discounted at the effective interest rate. In determining future cash flows to calculate expected credit losses, the NBU considers all conditions of the financial instrument over its life (e.g., option of long-term repayment, term extension, requirements to early repay the loan, and other similar options). Cash flows that are taken into consideration include cash flows from sales of pledged properties or other sources that improve the financial instrument's credit quality, which form an integral part of contractual terms. The NBU uses judgments/assumptions in order to be able to reliably estimate the expected lives of financial instruments.

Judgments/assumptions represent a documented reasonable decision of the NBU's employees that is based on:

compliance of actual actions in determining each component for assessing expected credit losses with requirements of the NBU's methodology on assessment of expected credit losses on financial instruments

a comprehensive and objective analysis of all information that has an effect on the determining of the amount of components and factors (events, features) for assessing credit risk and expected credit losses

own experience of the NBU that is based on reliable, continuous, complete, and integrated statistical data accumulated for at least three consecutive years

ensuring a full, timely, and objective assessment of credit risk and expected credit losses in compliance with the principles determined by the NBU's methodology on assessment of expected credit losses on financial instruments.

To calculate expected credit losses, the NBU uses the following approaches:

1) assessing on a collective basis (credit risk parameters), according to which an expected credit loss is a multiplication result of loss given default, probability of default, and exposure at default

2) assessing on a collective basis (repayment scenarios), with reference to an unconditional probability of their occurrence, according to which an expected credit loss is a present value of difference between estimated contractual cash flows payable to the NBU under the loan agreements discounted at the effective interest rate and all cash flows the NBU expects to receive under probable scenarios of loan repayment discounted at the effective interest rate

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

12-month expected credit losses form a part of whole life expected credit losses that may arise from a borrower's default event that occurs during 12 months from the reporting date (or a shorter period, if the expected life of the financial instrument is less than 12 months).

12-month expected credit losses reflect under-received amounts of cash flows for the whole life that may arise from a default event that occurs during 12 months from the reporting date weighted for probability of default (or probability of a certain range of possible loan repayment scenarios) assessed on the basis of a cumulative probability of a borrower's default during 12 months after the reporting date (or remaining life).

Life expected credit losses of financial instruments are expected credit losses for the whole life of a financial instrument that may arise from a borrower's default event that occurs during the financial instrument's life.

Life expected credit losses of financial instruments reflect under-received amounts of cash flows for the whole life that may arise from a default event that occurs during the whole life from the reporting date weighted for probability of default (or probability of a certain range of possible loan repayment scenarios) assessed on the basis of a cumulative probability of a borrower's default during the whole life of the financial instrument remaining as at the reporting date.

A significant increase in credit risk is assessed on the basis of both types of information: quantitative and qualitative factors, including the category of internal credit rating of borrowers which considers changes in the degree of credit risk as at the reporting date.

In the event of absence of own historical data or availability of insufficient historical data about losses, it is allowed to use the historical data of other institutions on comparable groups of assets. Also, it is allowed to use judgments of the NBU's employees.

Own experience regarding losses is adjusted on the basis of current information in order to reflect the effect of current economic conditions that did not exist in the period to which the available historical data on losses belong and exclude the effect of conditions of the said period that were absent as at the reporting date.

In the event own historical statistical information regarding losses is used in order to assess future cash flows, such historical data should be applied only to those groups of assets that have been defined on the principles that are similar to the principles applied in respect of the groups on which the historical data about losses are based. Thus, the methods applied should allow comparing historical data about losses for the group of assets with similar characteristics of credit risk and actual data that reflect current conditions.

Objective evidence of impairment is recognized at the level of a financial instrument. An instrument-by-instrument approach envisages that, in the event there is at least one indicator of objective evidence of impairment of a financial instrument, then the whole instrument with a borrower and all financial instruments of that borrower are recognized as exposed to objective evidence of impairment. A default event is one of indicators of the objective evidence of impairment.

29 Foreign Currency Risk

As at 31 December 2018, the NBU had the following positions in currencies:

	UAH	USD	EUR	SDR	GBP	Other	on-monetary	Total
								(in UAH millions)
Financial assets								
Funds and deposits in foreign currencies	–	70,183	25,333	–	7,175	13,990	–	**116,681**
Foreign securities	–	342,632	52,536	–	10,102	27,600	121	**432,991**
SDR holdings	–	–	–	100	–	–	–	**100**
Domestic securities	360,744	692	–	–	–	–	–	**361,436**
Loans to banks and other borrowers	22,145	–	–	–	–	–	–	**22,145**
Internal state debt	1,834	–	–	–	–	–	–	**1,834**
IMF quota contributions	–	–	–	77,472	–	–	–	**77,472**
Other financial assets	214	–	–	132	–	–	–	**346**
Total financial assets	**384,937**	**413,507**	**77,869**	**77,704**	**17,277**	**41,590**	**121**	**1,013,005**
Financial liabilities								
Banknotes and coins in circulation	400,119	–	–	–	–	–	–	**400,119**
Accounts of banks	37,840	535	129	–	1	4	–	**38,509**
Accounts of government and other institutions	17,002	25,040	5,685	–	–	–	–	**47,727**
Certificates of deposit issued by the NBU	61,867	–	–	–	–	–	–	**61,867**
Borrowings received	–	2,769	–	–	–	–	–	**2,769**
Liabilities to the IMF except for quota contributions	–	–	–	217,300	–	–	–	**217,300**
Liabilities to the IMF in respect of quota contributions	–	–	–	77,462	–	–	–	**77,462**
Other financial liabilities	537	12	25	–	–	–	–	**574**
Total financial liabilities	**517,365**	**28,356**	**5,839**	**294,762**	**1**	**4**	**–**	**846,327**
Net balance sheet position	**(132,428)**	**385,151**	**72,030**	**(217,058)**	**17,276**	**41,586**	**121**	**166,678**

As at 31 December 2017, the NBU had the following positions in currencies:

	UAH	USD	EUR	SDR	GBP	Other	Non-monetary	Total
								(in UAH millions)
Financial assets								
Funds and deposits in foreign currencies	–	16,532	5,711	–	733	824	–	23,800
Foreign securities	–	334,393	41,150	–	10,799	27,992	121	414,455
SDR holdings	–	–	–	60,860	–	–	–	60,860
Domestic securities	372,022	675	–	–	–	–	–	372,697
Loans to banks and other borrowers	32,417	–	–	–	–	–	–	32,417
Internal state debt	1,926	–	–	–	–	–	–	1,926
IMF quota contributions	–	–	–	80,415	–	–	–	80,415
Other financial assets	145	–	–	800	–	–	–	945
Total financial assets	**406,510**	**351,600**	**46,861**	**142,075**	**11,532**	**28,816**	**121**	**987,515**
Financial liabilities								
Banknotes and coins in circulation	361,544	–	–	–	–	–	–	361,544
Accounts of banks	39,267	626	94	–	2	5	–	39,994
Accounts of government and other institutions	8,904	42,902	4,318	–	–	–	–	56,124
Certificates of deposit issued by the NBU	67,024	–	–	–	–	–	–	67,024
Borrowings received	–	2,807	–	–	–	–	–	2,807
Liabilities to the IMF except for quota contributions	–	–	–	206,245	–	–	–	206,245
Liabilities to the IMF in respect of quota contributions	–	–	–	80,411	–	–	–	80,411
Other financial liabilities	415	18	15	–	–	10	–	458
Total financial liabilities	**477,154**	**46,353**	**4,427**	**286,656**	**2**	**15**	**–**	**814,607**
Net balance sheet position	**(70,644)**	**305,247**	**42,434**	**(144,581)**	**11,530**	**28,801**	**121**	**172,908**

Assets and liabilities in other currencies mainly included positions in CHF, AUD, JPY, and CNY.

30 Interest Rate Risk

As at 31 December 2018, the NBU had the following structure of the weighted average interest rates by major currencies for monetary financial interest-bearing instruments. The analysis has been prepared using the weighted-average contractual rates at the reporting date.

	UAH	USD	EUR	SDR	GBP	Other	Total weighted average interest rate
							(in %)
Financial assets							
Term deposits with banks in OECD countries	–	2.61	–	–	0.79	2.45	2.45
Foreign securities	–	2.80	0.17	–	1.04	3.06	2.45
SDR holdings	–	–	–	1.11	–	–	1.11
Domestic securities	13.17	–	–	–	–	–	13.17
Loans to banks and other borrowers	18.13	–	–	–	–	–	18.13
Internal state debt	8.53	–	–	–	–	–	8.53
Financial liabilities							
Household Deposit Guarantee Fund	4.00	–	–	–	–	–	4.00
Certificates of deposit issued by the NBU	17.03	–	–	–	–	–	17.03
Borrowings received	–	5.19	–	–	–	–	5.19
Liabilities to the IMF, except for quota contributions	–	–	–	3.26	–	–	3.26

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 DGLBs. 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 Household 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 at 31 December 2017, the NBU had the following structure of the weighted average interest rates by major currencies for monetary financial interest-bearing instruments. The analysis has been prepared using the weighted-average contractual rates at the reporting date.

	UAH	USD	EUR	SDR	GBP	Other	Total weighted average interest rate
							(in %)
Financial assets							
Term deposits with banks in OECD countries	–	1.51	(0.48)	–	0.49	0.80	1.27
Foreign securities	–	1.98	0.16	–	0.62	2.21	1.78
SDR holdings	–	–	–	0.74	–	–	0.74
Domestic securities	12.02	–	–	–	–	–	12.02
Loans to banks and other borrowers	16.42	–	–	–	–	–	16.42
Internal state debt	8.54	–	–	–	–	–	8.54
Financial liabilities							
Household Deposit Guarantee Fund	4.83	–	–	–	–	–	4.83
Certificates of deposit issued by the NBU	13.40	–	–	–	–	–	13.40
Borrowings received	–	4.06	–	–	–	–	4.06
Liabilities to the IMF, except for quota contributions	–	–	–	2.75	–	–	2.75

Analysis of assets and liabilities by periods of interest rate repricing

The table below summarizes concentration of interest rates by periods of repricing categorized by the earlier of contractual 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 at 31 December 2018, the NBU's 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
							(in UAH millions)
Financial assets							
Funds and deposits in foreign currencies	103,202	10,794	–	–	–	2,685	**116,681**
Foreign securities	24,720	65,997	107,492	233,977	684	121	**432,991**
SDR holdings	100	–	–	–	–	–	**100**
Domestic securities	153,052	7,082	8,420	48,083	144,107	692	**361,436**
Loans to banks and other borrowers	9,630	3,517	1,528	7,470	–	–	**22,145**
Internal state debt	–	27	81	432	1,294	–	**1,834**
IMF quota contributions	–	–	–	–	–	77,472	**77,472**
Other financial assets	6	2	8	27	17	286	**346**
Total financial assets	**290,710**	**87,419**	**117,529**	**289,989**	**146,102**	**81,256**	**1,013,005**
Financial liabilities							
Banknotes and coins in circulation	–	–	–	–	–	400,119	**400,119**
Accounts of banks	–	–	–	–	–	38,509	**38,509**
Accounts of government and other institutions	7,082	–	–	–	–	40,645	**47,727**
Certificates of deposit issued by the NBU	61,867	–	–	–	–	–	**61,867**
Borrowings received	–	2,769	–	–	–	–	**2,769**
Liabilities to the IMF except for quota contributions	216,358	–	–	–	–	942	**217,300**
Liabilities to the IMF in respect of quota contributions	–	–	–	–	–	77,462	**77,462**
Other financial liabilities	–	–	–	–	–	574	**574**
Total financial liabilities	**285,307**	**2,769**	**–**	**–**	**–**	**558,251**	**846,327**
Net gap	**5,403**	**84,650**	**117,529**	**289,989**	**146,102**	**(476,995)**	**166,678**
Cumulative gap	**5,403**	**90,053**	**207,582**	**497,571**	**643,673**	**166,678**	

As at 31 December 2017, the NBU's 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
							(in UAH millions)
Financial assets							
Funds and deposits in foreign currencies	21,740	–	–	–	–	2,060	**23,800**
Foreign securities	15,250	66,041	96,836	234,117	2,090	121	**414,455**
SDR holdings	60,860	–	–	–	–	–	**60,860**
Domestic securities	149,208	10,717	9,017	46,355	156,725	675	**372,697**
Loans to banks and other borrowers	12,512	2,675	5,115	12,115	–	–	**32,417**
Internal state debt	–	27	80	428	1,391	–	**1,926**
IMF quota contributions	–	–	–	–	–	80,415	**80,415**
Other financial assets	6	3	11	38	25	862	**945**
Total financial assets	**259,576**	**79,463**	**111,059**	**293,053**	**160,231**	**84,133**	**987,515**
Financial liabilities							
Banknotes and coins in circulation	–	–	–	–	–	361,544	**361,544**
Accounts of banks	–	–	–	–	–	39,994	**39,994**
Accounts of government and other institutions	3,740	–	–	–	–	52,384	**56,124**
Certificates of deposit issued by the NBU	64,595	2,429	–	–	–	–	**67,024**
Borrowings received	–	2,807	–	–	–	–	**2,807**
Liabilities to the IMF except for quota contributions	205,303	–	–	–	–	942	**206,245**
Liabilities to the IMF in respect of quota contributions	–	–	–	–	–	80,411	**80,411**
Other financial liabilities	–	–	–	–	–	458	**458**
Total financial liabilities	**273,638**	**5,236**	**–**	**–**	**–**	**535,733**	**814,607**
Net gap	**(14,062)**	**74,227**	**111,059**	**293,053**	**160,231**	**(451,600)**	**172,908**
Cumulative gap	**(14,062)**	**60,165**	**171,224**	**464,277**	**624,508**	**172,908**	

As at 31 December 2018, a portion of foreign securities bearing variable interest rates amounted to 15.60% of the total portfolio (31 December 2017: 7.32%).

31 Liquidity Risk

For the purposes of liquidity risk estimation, financial assets are grouped by the period remaining as at the reporting date to repayment of the contractual cash flows. 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 the remaining contractual maturity at the reporting date.

The amounts of financial assets and liabilities disclosed in the liquidity risk table below are the contractual discounted cash flows. Derivatives settled on a net basis are included at the net amounts expected to be paid. Impaired loans are included at their carrying amounts net of impairment provisions and based on the expected timing of cash inflows.

When the amounts payable are not fixed, the amounts disclosed are determined by reference to the conditions existing at the reporting date. Foreign currency payments are translated using the spot exchange rates at the reporting date.

The NBU's liquidity risk position as at 31 December 2018 was as follows:

	On demand and up to 1 month	1–3 months	3–12 months	1–5 years	Over 5 years	Maturity not defined	Total
							(in UAH millions)
Financial assets							
Funds and deposits in foreign currencies	105,887	10,794	–	–	–	–	**116,681**
Foreign securities	7,114	16,682	110,744	297,645	685	121	**432,991**
SDR holdings	100	–	–	–	–	–	**100**
Domestic securities	7,879	7,082	8,420	48,083	289,972	–	**361,436**
Loans to banks and other borrowers	9,630	3,517	1,528	7,470	–	–	**22,145**
Internal state debt	–	27	81	432	1,294	–	**1,834**
IMF quota contributions	77,472	–	–	–	–	–	**77,472**
Other financial assets	4	3	11	173	30	125	**346**
Total financial assets	**208,086**	**38,105**	**120,784**	**353,803**	**291,981**	**246**	**1,013,005**
Financial liabilities							
Banknotes and coins in circulation	400,119	–	–	–	–	–	**400,119**
Accounts of banks	38,509	–	–	–	–	–	**38,509**
Accounts of government and other institutions	47,727	–	–	–	–	–	**47,727**
Certificates of deposit issued by the NBU	61,867	–	–	–	–	–	**61,867**
Borrowings received	–	–	–	2,769	–	–	**2,769**
Liabilities to the IMF except for quota contributions	3	5,894	11,443	135,864	60,960	3,136	**217,300**
Liabilities to the IMF in respect of quota contributions	77,462	–	–	–	–	–	**77,462**
Other financial liabilities	48	4	11	–	–	511	**574**
Total future payments under financial liabilities	**625,735**	**5,898**	**11,454**	**138,633**	**60,960**	**3,647**	**846,327**
Liquidity gap arising from financial instruments	**(417,649)**	**32,207**	**109,330**	**215,170**	**231,021**	**(3,401)**	**166,678**
Cumulative liquidity gap	**(417,649)**	**(385,442)**	**(276,112)**	**(60,942)**	**170,079**	**166,678**	

The NBU's liquidity risk position as at 31 December 2017 was as follows:

	On demand and up to 1 month	1–3 months	3–12 months	1–5 years	Over 5 years	Maturity not defined	Total
							(in UAH millions)
Financial assets							
Funds and deposits in foreign currencies	23,800	–	–	–	–	–	**23,800**
Foreign securities	8,656	42,529	100,852	260,207	2,090	121	**414,455**
SDR holdings	60,860	–	–	–	–	–	**60,860**
Domestic securities	4,035	10,717	9,017	46,355	302,573	–	**372,697**
Loans to banks and other borrowers	4,739	2,675	5,115	12,115	–	7,773	**32,417**
Internal state debt	–	27	80	428	1,391	–	**1,926**
IMF quota contributions	80,415	–	–	–	–	–	**80,415**
Other financial assets	6	3	14	852	41	29	**945**
Total financial assets	**182,511**	**55,951**	**115,078**	**319,957**	**306,095**	**7,923**	**987,515**
Financial liabilities							
Banknotes and coins in circulation	361,544	–	–	–	–	–	**361,544**
Accounts of banks	39,994	–	–	–	–	–	**39,994**
Accounts of government and other institutions	56,124	–	–	–	–	–	**56,124**
Certificates of deposit issued by the NBU	64,595	2,429	–	–	–	–	**67,024**
Borrowings received	–	–	–	–	2,807	–	**2,807**
Liabilities to the IMF except for quota contributions	–	6,086	15,430	89,888	91,586	3,255	**206,245**
Liabilities to the IMF in respect of quota contributions	80,411	–	–	–	–	–	**80,411**
Other financial liabilities	5	5	398	–	–	50	**458**
Total future payments under financial liabilities	**602,673**	**8,520**	**15,828**	**89,888**	**94,393**	**3,305**	**814,607**
Liquidity gap arising from financial instruments	**(420,162)**	**47,431**	**99,250**	**230,069**	**211,702**	**4,618**	**172,908**
Cumulative liquidity gap	**(420,162)**	**(372,731)**	**(273,481)**	**(43,412)**	**168,290**	**172,908**	

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 contractual balances (including interest payable) that are not recognized in the consolidated statement of financial position.

Repayment periods under contractual undiscounted cash flows from financial liabilities as at 31 December 2018 were as follows:

	On demand and up to 1 month	1–3 months	3–12 months	1–5 years	Over 5 years	Maturity not defined	Total
							(in UAH millions)
Financial liabilities							
Banknotes and coins in circulation	400,119	–	–	–	–	–	**400,119**
Accounts of banks	38,509	–	–	–	–	–	**38,509**
Accounts of government and other institutions	47,727	–	–	–	–	–	**47,727**
Certificates of deposit issued by the NBU	62,021	–	–	–	–	–	**62,021**
Borrowings received	–	36	108	3,092	–	–	**3,236**
Liabilities to the IMF except for quota contributions	3	6,641	16,937	154,894	68,090	3,136	**249,701**
Liabilities to the IMF in respect of quota contributions	77,462	–	–	–	–	–	**77,462**
Other financial liabilities	48	4	11	–	–	511	**574**
Total future payments under financial liabilities	**625,889**	**6,681**	**17,056**	**157,986**	**68,090**	**3,647**	**879,349**

Repayment periods under contractual undiscounted cash flows from financial liabilities as at 31 December 2017 were as follows:

	On demand and up to 1 month	1–3 months	3–12 months	1–5 years	Over 5 years	Maturity not defined	Total
							(in UAH millions)
Financial liabilities							
Banknotes and coins in circulation	361,544	–	–	–	–	–	**361,544**
Accounts of banks	39,994	–	–	–	–	–	**39,994**
Accounts of government and other institutions	56,124	–	–	–	–	–	**56,124**
Certificates of deposit issued by the NBU	64,704	2,479	–	–	–	–	**67,183**
Borrowings received	–	28	85	456	2,826	–	**3,395**
Liabilities to the IMF except for quota contributions	–	6,538	19,477	103,454	94,579	3,255	**227,303**
Liabilities to the IMF in respect of quota contributions	80,411	–	–	–	–	–	**80,411**
Other financial liabilities	5	5	398	–	–	50	**458**
Total future payments under financial liabilities	**602,782**	**9,050**	**19,960**	**103,910**	**97,405**	**3,305**	**836,412**

32 Off-Balance Sheet Commitments and Derivative Financial Instruments

Capital Commitments
As at 31 December 2018, the NBU had capital commitments in respect of acquisition, construction, and improvement of property and equipment and intangible assets totaling to UAH 118 million (31 December 2017: UAH 87 million).

Derivative Financial Instruments
The NBU carried out transactions with futures for the purposes of regulating the interest rate risk since October 2013 under the Investment Management and Consulting Services Agreement between the NBU and the International Bank for Reconstruction and Development.

As at 31 December 2018, the NBU had 478 long stock-exchange interest futures contracts maturing in March 2019 the notional value of which equaled to UAH 2,993 million or USD 108 million, and 258 short stock-exchange interest futures contracts maturing from June 2019 to March 2020 the notional value of which equaled to UAH 1,740 million or USD 63 million (31 December 2017: 300 long stock-exchange interest futures contracts maturing in March 2018 the notional value of which equaled to UAH 1,803 million or USD 64 million, and 396 short stock-exchange interest futures contracts maturing from March 2018 to September 2022 the notional value of which equaled to UAH 2,719 million or USD 97 million). Funds for settlements under futures transactions in the amount of UAH 10 million (2017: UAH 6 million) were measured at fair value and included in funds and deposits in foreign currency (Note 5).

Legal Proceedings
From time to time and in the normal course of business, claims against the NBU occur. As at 31 December 2018, no claims existed which, according to the NBU's management's estimates, could give rise to potential losses (31 December 2017: on certain claims for the total amount of UAH 1,985 million, there was a possibility of potential losses, although it was not high). On such claims, no provisions for contingencies were created in these consolidated financial statements.

The NBU recognized a respective provision for the claims that, according to the NBU, could give rise to potential losses (Note 18). The National Bank is also a defendant in claims for restoration of some banks. At present, the mechanism of restoration of banks in Ukraine is not regulated by law.

33 Fair Value of Financial Assets and Liabilities

The estimated fair values of financial assets and liabilities have been determined by the NBU using available market information, where it exists, and appropriate valuation methodologies. However, judgment is necessarily required to interpret the market data to determine the estimated fair value. As disclosed in Note 4, the economy of Ukraine displays characteristics of an emerging market, and the level of activity in financial markets of Ukraine at the moment is low. As such, the estimates may not be fully reflective of the value that could be realized by the NBU in the current circumstances.

Financial Assets and Liabilities Measured at Fair Value
The financial instruments measured by the NBU at fair value include foreign securities, a portion of domestic securities, government derivatives and futures which are included in the balance sheet item of funds and deposits in foreign currency.

All foreign debt securities are carried in the consolidated financial statements at fair value. The fair value of those securities is determined on the basis of quotations in the active market (Level 1 inputs) or, in absence of data on quotations in the active market, based on the income approach and Level 3 inputs (return on such securities at the time of their initial placement by an issuer and assumption that the return will remain unchanged until repayment of those securities, considering their short maturities).

The fair value of futures and the fair value of government derivatives are determined on the basis of quotations in the active market (Level 1 inputs).

All domestic securities owned by the NBU have no active market. The fair value of such domestic securities is determined by the NBU based on the income approach and:

for long-term inflation government bonds – Level 2 inputs (spot rates calculated on the basis of the zero-coupon yield curve built on the data of actually concluded and performed agreements of DGLBs using the Nelson-Siegel parametric model and actual consumer price indices for a month period in respect of the prior month during the period from March to November 2018) and Level 3 inputs (consensus forecast of consumer price index indicators for the next 5 years from the FOCUSECONOMICS monthly for December 2018 and target indicators of the consumer price index determined by the NBU for the period from Year 6 to Year 30)

for other domestic bonds – Level 2 inputs (spot rates calculated on the basis of the zero-coupon yield curve built on the data of actually concluded and performed agreements of DGLBs using the Nelson-Siegel parametric model) for bonds of other government institutions – Level 2 inputs (spot rates calculated on the basis of the zero-coupon yield curve built on the data of actually concluded and performed agreements of DGLBs using the Nelson-Siegel parametric model) and Level 3 inputs (premium for risk of securities compared to risk of DGLBs determined with the use of expert judgments at the level of 100 basis points which considers the availability of the Government's guarantees in respect of those securities).

Financial Assets and Liabilities Measured at Amortized Cost

The NBU has estimated that the fair value of certain financial assets and liabilities measured at amortized cost is not significantly different from their carrying values. Those 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 government and other institutions, certificates of deposit issued by the NBU and liabilities to the IMF, other financial liabilities. The fair values of those financial instruments are not additionally disclosed.

Financial instruments measured at amortized cost and the fair value of which may significantly different from their carrying values include domestic securities, internal state debt in the national currency, loans to banks and other borrowers. All those financial instruments do not have the active market.

Fair values of those financial assets and liabilities for which no active market exists have been estimated by the NBU using discounted cash flow techniques (income approach). These models take into account future interest payments and principal repayments, the repayment period, and a discount rate.

Inputs (including discount rates) for calculating the fair value of domestic securities measured at amortized cost do not differ from those used for calculating the fair value of domestic securities measured at fair value.

As discount rates to determine the fair value of internal state debt in the national currency, the NBU used the average weighted discount rate of the NBU on all refinancing instruments (Level 3 inputs).

As discount rates to determine the fair value of loans to banks and other borrowers, the NBU used the market rate (the NBU's discount rate) plus 1.5% as at the calculation date (Level 3 inputs).

The discount rates used were as follows:

	2018	2017
	Discount rate, in % per annum	Discount rate, in % per annum
Domestic securities in the national currency:		
Domestic government loan bonds	**7.22–20.41**	7.21–16.21
Bonds of other government institutions	–	17.14
Internal state debt in the national currency (1994–1996)	**19.22**	15.92
Loans to banks and other borrowers	**19.5**	16.0

The following table summarizes the carrying amounts and estimated fair values of those financial assets not presented in the NBU's consolidated statement of financial position at their fair values:

	2018		2017	
	Carrying amount	**Estimated fair value**	Carrying amount	Estimated fair value
				(in UAH millions)
Domestic securities in the national currency:				
Domestic government loan bonds	**360,744**	**339,924**	370,967	364,253
Bonds of other government institutions	**–**	**–**	954	942
Total **domestic securities measured at fair value**	**360,744**	**339,924**	371,921	365,195
Internal state debt	**1,834**	**1,128**	1,926	1,335
Loans to banks and other borrowers	**22,145**	**21,540**	32,417	32,451

Taking into account that calculations of the estimated fair value 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.

For financial instruments, the levels in the fair value hierarchy into which the fair values were categorized were as follows:

	2018			2017		
	Level 1	**Level 2**	**Level 3**	Level 1	Level 2	Level 3
						(in UAH millions)
Assets measured at fair value:						
Funds and deposits in foreign currencies (futures)	**10**	–	–	6	–	–
Foreign securities measured at fair value	**392,684**	**–**	**40,307**	346,145	–	68,310
Domestic debt securities measured at fair value:						
In the national currency						
Domestic government loan bonds	–	–	–	–	101	–
In foreign currencies						
Government derivatives	**692**	–	–	675	–	–
Assets for which fair value is disclosed:						
Domestic securities						
In the national currency :						
Domestic government loan bonds	–	**196,241**	**143,683**	–	218,464	145,789
Bonds of other government institutions	–	–	–	–	–	942
Internal state debt	–	–	**1,128**	–	–	1,335
Loans to banks and other borrowers	–	–	**21,540**	–	–	32,451

In 2018, there were no significant transfers of financial instruments between Level 1 and Level 2 of fair value hierarchy.

Long-term inflation domestic government loan bonds the fair values of which are disclosed are included in Level 3 of the fair value hierarchy.

No changes in the structure or the carrying value of financial instruments that were included in Level 3 of the fair value hierarchy occurred during 2018 and 2017. Change of inputs to valuation models according to reasonably possible alternative assumptions would not have had a significant impact on the fair value of those instruments as at 31 December 2018 and 2017.

The reconciliation of Level 3 fair value measurements of financial assets is presented as follows:

	Fair value of foreign securities measured at fair value through profit or loss and put into Level 3 fair value hierarchy
	(in UAH millions)
Foreign securities as at 1 January 2017	**121**
Total gains/losses	5,224
Purchases of foreign securities	62,965
Redemptions of foreign securities	–
Sales of foreign securities	–
Foreign securities as at 31 December 2017	**68,310**
Total gains/losses	(2,633)
Purchases of foreign securities	39,921
Redemptions of foreign securities	(60,997)
Sales of foreign securities	(4,294)
Foreign securities as at 31 December 2018	**40,307**

Average weighted modified duration of financial assets measured at fair value and put into Level 3 fair value hierarchy (except for capital instruments measured at fair value through profit or loss) is 0.38. Increase by 1 bp of yield rates used to identify the fair value of such financial assets as at 31 December 2018 (Level 3 input) will lead to a UAH 151 million drop of the fair value, while their decrease by 1 bp will push the fair value up by UAH 151 million.

34 Presentation of Financial Instruments by Measurement Categories

In accordance with IFRS 9 “Financial Instruments”, the NBU classifies its financial assets into the following categories: financial assets at fair value through profit or loss and financial assets measured at amortized cost.

All financial liabilities of the NBU are carried at amortized cost.

The following table analyzes financial assets by these measurement categories as at 31 December 2018:

	Assets measured at fair value through profit or loss	Assets measured at amortized cost	Total
			(in UAH millions)
Financial assets			
Funds and deposits in foreign currencies	10	116,671	**116,681**
Foreign securities	432,991	–	**432,991**
SDR holdings	–	100	**100**
Domestic securities	692	360,744	**361,436**
Loans to banks and other borrowers	–	22,145	**22,145**
Internal state debt	–	1,834	**1,834**
IMF quota contributions	–	77,472	**77,472**
Other financial assets	13	333	**346**
Total financial assets	**433,706**	**579,299**	**1,013,005**

The following table analyzes financial assets by these measurement categories as at 1 January 2018:

	Assets measured at fair value through profit or loss	Assets measured at amortized cost	Total
			(in UAH millions)
Financial assets			
Funds and deposits in foreign currencies	6	23,794	**23,800**
Foreign securities	414,455	–	**414,455**
SDR holdings	–	60,860	**60,860**
Domestic securities	776	371,921	**372,697**
Loans to banks and other borrowers	–	32,417	**32,417**
Internal state debt	–	1,926	**1,926**
IMF quota contributions	–	80,415	**80,415**
Other financial assets	16	929	**945**
Total financial assets	**415,253**	**572,262**	**987,515**

35 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 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. Related parties of the NBU include the Government, state-controlled entities, key management personnel, etc.

In the normal course of business, the NBU enters into transactions with the related parties. Only material transactions with related parties are provided in this Note. The outstanding balances at the year-end were as follows:

		2018			2017		
	Notes	**Government and state-controlled entities**	**Associates**	**Other related parties**	Government and state-controlled entities	Associates	Other related parties
							(in UAH millions)
Domestic securities	8	**361,436**	**–**	**–**	372,697	–	–
Loans to banks and other borrowers		**18,439**	**–**	**–**	22,212	–	–
Loans to the Household Deposit Guarantee Fund	9	**1,458**	**–**	**–**	6,479	–	–
Provision for loans to banks and other borrowers		**(4,413)**	**–**	**–**	(4,509)	–	–
Internal state debt		**1,834**	**–**	**–**	1,926	–	–
Other assets		**31**	**132**	**–**	33	106	–
Accounts of banks		**16,483**	**–**	**–**	19,213	–	–
Accounts of government and other institutions	14	**40,417**	**191**	**3**	52,260	76	3
Accounts of the Household Deposit Guarantee Fund	14	**7,082**	**–**	**–**	3,740	–	–
Liability on profit distribution to the State Budget	19	**64,898**	**–**	**–**	44,614	–	–
Certificates of deposit issued by the NBU		**8,511**	**–**	**–**	15,591	–	–
Other liabilities		**4**	**–**	**–**	9	–	–

Other related parties included the Corporate Non-State Pension Fund of the NBU.

The terms of balances presented in the table 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 at 31 December 2018 bore contractual interest rates from 7.00% to 16.00% (31 December 2017: from 7.00% to 16.50%); those loans were repayable in the period from 1 year according to initial repayment terms (31 December 2017: from 1 to 2 years)

loans to the Household Deposit Guarantee Fund as at 31 December 2018 and 2017 bore interest rate of 12.5%

accounts of government and other institutions as at 31 December 2018 and 2017 were non-interest bearing

accounts of the Household Deposit Guarantee Fund bore interest rates of 4.00% as at 31 December 2018 (31 December 2017: 4.83%)

balances of obligatory reserves transferred by state-owned banks to the NBU's correspondent account (included in accounts of banks in the table above) did not earn interest (31 December 2017: no interest was accrued on balances of obligatory reserves transferred by state-owned banks to the NBU's correspondent account) (Note 13).

Terms and conditions of transactions with internal state debt and domestic securities are disclosed in respective notes.

Income and expense items from transactions with related parties were as follows:

	2018			2017		
	Government and state-controlled entities	**Associates**	**Other related parties**	Government and state-controlled entities	Associates	Other related parties
						(in UAH millions)
Interest income	**45,675**	**–**	**–**	51,409	–	–
Interest expense	**(2,267)**	**–**	**–**	(1,503)	–	–
Fee and commission income	**200**	**–**	**–**	288	–	–
Other income	**150**	**29**	**–**	117	18	–
Staff costs	**–**	**–**	**(29)**	–	–	(31)
Other expense	**–**	**–**	**–**	(7)	–	–
Net decrease in provisions	**95**	**–**	**–**	5,813	–	–

In accordance with the Law of Ukraine *On the National Bank of Ukraine*, services to the State Treasury of Ukraine are provided by the NBU free of charge.

In 2018, short-term benefits (salary) of key management personnel amounted to UAH 29.4 million, including remuneration to members of the NBU's Council in the amount of UAH 10.6 million (2017: short-term benefits (salary) of key management personnel amounted to UAH 23.1 million, including remuneration to members of the NBU's Council in the amount of UAH 10.7 million). As at 31 December 2018 and 2017, there were no outstanding balance of loans to key management personnel.

36 Events after the Reporting Period

In February 2019, the NBU repaid its liabilities to the IMF under the Stand-By Arrangement in the amount of SDR 129 million (UAH 4,918 million at the official exchange rate at the repayment date, or UAH 4,869 million at the IMF's annual exchange rate).

16 April 2019
City of Kyiv, Ukraine