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Consolidated Financial Statements, Consolidated Management Report

Key Performance Indicators of Ukrainian Economy and Financial Sector in 2021



211.7 UAH
billion

up by 16%

Banking sector
regulatory capital



+3.4%

Real GDP
change



77.5 UAH
billion

up by 95.2%

Banking
sector profit



1,017 UAH
billion

up by 21%

Hryvnia deposits



10%

(target: 5% ± 1 pp)

Inflation



9%

up by 3 pp

The NBU's key
policy rate



742.4 UAH
billion

up by 24%

Hryvnia loans



30.9 USD
billion

up by 6%

International reserves



2,054 UAH
billion

up by 12.7%

Banking sector
net assets



60.9%

up by 5.1 pp

Cashless settlements
within total card transactions

Address by NBU Governor



Kyrylo SHEVCHENKO
Governor of the National Bank
of Ukraine

Dear readers,

We would like to present you our report detailing the main results of the NBU's work in 2021.

Although we came into 2021 hardened from the tough time we had in 2020 fighting the pandemic, the year 2021 struck us as no less full of challenges – old and new – for Ukraine and the world. But as life has often shown, things only start to make sense when put into perspective. From the standpoint of 2022, when this report was compiled, even as Ukraine continues to repel full-scale military aggression from Russia, the events of 2021 appear more like a gust of wind that precedes a storm. Nonetheless, last year's events did not prevent us from preparing the Ukrainian financial system for the most horrendous worst case scenario that this war has proved to be.

In 2021, our expectations for the pandemic and the economy were constantly tested by the variability of COVID-19 incidence, the vaccination rollout, and the emergence and rapid spread of new variants of the virus, which forced countries to reinstitute quarantine restrictions. Efforts to overcome the effects and negative trends of the COVID-19 pandemic were hampered by slow economic growth, high inflationary pressures, and growing threats from rising geopolitical tensions.

Despite these difficult conditions, and the strong influence of external factors, Ukraine ended the year with accelerating economic growth, recovering lending and investment, an inflation rate declining from a peak, a stable domestic currency, solid FX reserves, a resilient and reliable banking sector, and an overhauled and more transparent nonbank financial market. At the beginning of 2021, we had more optimistic expectations for economic development (Ukraine's GDP growth was projected at 3.8%, the 3.4% growth in GDP recorded at the end of 2021). But even against the backdrop of global events, it is safe to say that we achieved positive and sometimes even record results.

The NBU, on the one hand, continued to confidently pursue its mission, ensuring price and financial stability, and the strengthening of the country's macroeconomic development. On the other hand, the central bank persevered in identifying and rooting out the banking system's weaknesses and vulnerabilities, and working hard to expand the banking system's flexibility, shore up its stability, and increase its resilience.

As part of these efforts, the NBU mobilized its entire arsenal of tools, its available resources, and the experience and knowledge it has acquired, while remaining a strong and independent leader on the way to change. We take pride in having reaffirmed our reliability, even in a fragile environment, by strengthening public trust in the NBU's values and policies, and in the financial system as a whole.

But most important is that the NBU's efforts ensured the construction of a strong and resilient banking system, which not only withstood the outbreak of the war, but which also proved, and is currently continuing to prove, its ability to successfully maintain the financial defenses of our country and support its economy as the war grinds on.

In 2021, the theme of record inflation growth dominated the activities of almost all central banks. Realizing that inflation would not go away on its own, the NBU in 2021 was one of the first central banks to adjust its monetary policy to take into account the macroeconomic environment and the high degree of uncertainty. At the same time, we staunchly pursued three priorities: the consistency, predictability, and transparency of our policies.

Having started to raise the key policy rate in March last year, we increased it during the year by 3 percentage points, to 9%.

With the banking system having successfully come through the COVID-19 turbulence and in fact starting to quickly ramp up exposures, the NBU abandoned the nonconventional measures it introduced in 2020, as they were no longer necessary. However, to shield the financial markets from shocks, we ensured that this rollback was very gradual, and quite understandable to market participants.

In 2021, the NBU continued to pursue a flexible exchange rate policy in the FX market. As before, we smoothed out excessive exchange rate fluctuations and increased our "safety cushion" by accumulating international reserves. As a result, the NBU ended 2021 as a net purchaser of USD 2.4 billion through FX interventions. This boosted Ukraine's international reserves to a record USD 31 billion, even more than the pre-crisis level seen in 2014. This level of reserves, backed by public confidence in the NBU's monetary policy, has been one of the cornerstones of our financial strength.

The hryvnia was strengthening for most of last year, resulting in Ukraine's inflation trend already beginning to reverse in 2021, earlier than in many other countries. After peaking at 11% in September last year, consumer inflation fell to 10% in December. We were also able to keep inflation expectations in check. The NBU's rapid response therefore prevented the emergence of an inflationary spiral that, had it been allowed to proceed, would have made our monetary policy much tighter and harmed Ukraine's economic growth.

It is noteworthy that the NBU's FX policy in 2021 strengthened public confidence in the hryvnia, judging by the clear downward trend in dollarization of both deposits (which fell over the year to 32.4%, down from 37.7%) and loans (which fell to 28.9%, from 36.7%).

Given the macroeconomic preconditions and the priority need to ensure macrofinancial stability, the NBU resolutely pressed forward with its currency liberalization efforts. In 2021, the central bank eased its heaviest anti-crisis protection measures in terms of their impact on the FX market, and lifted or relaxed the accompanying FX restrictions. This ensured the establishment of a more favorable investment environment in Ukraine.

In the reporting year, the NBU stepped up its efforts to increase the stability and flexibility of the banking sector. We have implemented a set of some of the most effective measures that global best practices have to offer, including the resumption (after a one-year break caused by the COVID-19 crisis) of stress testing of Ukraine's largest banks, the tightening of bank capital requirements, the imposition of minimum operational risk coverage requirements, the update of capital buffer requirements, and more.

The banking sector came through 2021 without taking losses, and is in excellent shape. It is stable, efficient, well-capitalized, and liquid. In 2021, the banking sector reported record profits of UAH 77.5 billion (twice the level of 2020), and a return on equity of 35% (up from 19% in 2020). According to the stress tests we ran in the reporting year, which we resumed conducting in May 2021, the banks were generally prepared for a hypothetical crisis, and risks to bank capital had eased compared to two years earlier. All banks met their LCR requirements. Most banks actually exceeded them by a significant (double) margin.

The stress-testing methodology did not, of course, cover risks such as the breakout of a full-scale war. It was built on assumptions of an adverse macroeconomic scenario, which facilitated the assessment of banking sector resilience to deep and protracted crisis episodes. However, the versatility of this approach has proved its effectiveness, as it has enabled the banks to successfully maintain their financial stability in wartime.

As a result of this tremendous effort, the NBU, jointly with the banking community, formed a powerful reserve to support the economy and absorb shocks. In a remarkable and vital achievement, confidence in the banking system was maintained, allowing it survive the COVID-19 crisis, and then to endure the hardship of war. The banking system's quick adaptation to the rhythm and logic of wartime has confirmed the great importance of the reforms and measures carried out by the NBU, as has the stable operation of the banks in the current harsh conditions.

The pursuit of an accommodative monetary policy stance contributed to an active increase in bank lending to businesses and households. As a result, the banks in 2021 posted the highest increase in net hryvnia loan portfolios in a decade. During the reporting year, net hryvnia corporate loan portfolios surged by 40.2%, net hryvnia retail loans increased by 36.9%, and mortgages soared by 62.4%.

Without a doubt, one of the financial system's weaknesses is the relatively high share of state-owned banks in the banking sector. Such a heavy state presence in the banking system discourages competition and poses significant systemic risks. Reducing the market share of state-owned banks to 25% by 2025 is one of the strategic goals that Ukraine has set for itself. The NBU is in turn working hard to build on the current corporate governance model and to help reduce NPLs so as to boost the privatization potential of the state-owned banks.

In this regard, several important trends emerged in the reporting year. First, the share of state-owned banks

in net assets decreased to a five-year low of 46.7%, while that of private banks expanded. Second, the system's NPL ratio shrank to 30.0%, down from 41% in early 2021 and from 48.4% in early 2020. The largest contribution to this reduction came from state-owned banks. We will continue to work purposefully to ensure that Ukraine loses the title of being one of the leaders among European countries in terms of NPLs.

Such systemic changes have not gone unnoticed by potential investors, including foreign ones. Growing interest in Ukrainian banks (both public and private) has been seen from investors for the first time in a long while, and this interest is significant. The progress in the participation of international financial institutions in the capital of state-owned banks that was made last year (in particular, after UKRGASBANK JSB took out loans from the International Finance Corporation (IFC), and Oschadbank JSC from the EBRD) is a very important indicator of the real progress being made towards the privatization of the state-owned banks.

The NBU also paid attention to global issues, including the environment. In a bid to develop a green economy and achieve high standards in corporate governance, we took the lead in implementing green finance instruments. Thanks to effective cooperation between the NBU and IFC in 2021, the central bank prepared and launched a fundamentally new policy area that aims to develop sustainable finance. The purpose of this five-year policy is to introduce environmental, social, and governance factors into all aspects of financial institutions' activities. In the years ahead, the NBU will implement best practices and become the driving force behind Ukraine's transition to a sustainable future, both for ourselves and for generations to come.

The year 2021 was the first full year that the NBU regulated entities that provide nonbank financial services. This short period has been a turning point for the market for these services. The NBU managed to lay the groundwork for recovering and reinforcing confidence in this market. To this end, a number of measures have been taken to streamline the market and ensure its stability, increase its transparency, intensify its development, and strengthen the protection of the rights of financial service consumers. Specifically, the Verkhovna Rada in 2021 passed seven important laws in this area, which were drafted jointly with the central bank. One of the most significant achievements and the most anticipated events in consumer rights protection was the legislative regulation of the operation of collection agencies and creditors. In addition, for the first time in Ukraine's history, a Register of Collection Agencies was launched. We still have numerous changes and innovations to introduce in order to bring the market for nonbank financial services closer to European standards.

At the international level, the most significant achievement last year was the headway made in Ukraine's cooperation with the IMF. In November 2021, the first review of the Stand-By program was brought to a successful conclusion. As a result, Ukraine received the equivalent of about USD 700 million – the second tranche under the program.

The IMF also approved the extension of the program until the end of June 2022. This can be viewed as international confirmation of Ukraine's progress in implementing reforms. At the same time, it provided Ukraine with important financial support, strengthened our position in the global financial markets, and unlocked opportunities for continued cooperation with other international partners.

It should be noted that despite the ongoing quarantine restrictions, we continued to successfully build comprehensive cooperation with stakeholders and the world community, including partnerships with government agencies, a constructive dialogue with the business community, active communication with the public, and effective cooperation with international partners.

Without a doubt, the full-scale war that Russia has been waging against Ukraine has put on hold a number of reforms and the achievement of goals set in previous years. However, this is temporary. The NBU will definitely return to the pursuit of these goals after Ukraine wins the war. We believe that it is now the central bank's mission to do all it can to reestablish the prewar pace of the reform effort!

I am proud of the NBU team, which has demonstrated and continues to show amazing resilience in the face of challenges, and perseverance in finding solutions to difficult situations. The NBU will continue to prioritize professionalism, consistency, openness, and transparency. We are confidently pursuing the goal of developing an efficient and stable financial ecosystem in Ukraine to boost the country's economic growth and increase the well-being of its citizens.

Dear readers, I have described here only some of the NBU's key achievements over the past year. This report will tell you a great deal more about the NBU's work, and the results it has achieved. I am sure you will agree that the NBU has much to be proud of. Moreover, we do not plan to rest on our laurels – despite the magnitude of the new challenges.

Glory to Ukraine!

Address by the Chairman of the NBU Council



Bohdan Danylyshyn
Chairman of NBU Council

Ladies and gentlemen,

Unfortunately, 2021 was marked by a slow economic recovery following the devastating shock of the pandemic. Although expectations that further economic development would be V-shaped persisted for some time, the actual figures did not fully offset the previous year's decline. But very importantly, Ukraine retained its macroeconomic stability, slowed the spread of COVID-19, launched government support programs, and returned to economic growth. The economy therefore grew by 3%, the NBU estimates. "Our greatest glory is not in never falling, but in rising every time we fall," Confucius would likely have said of this outcome.

During the reporting year, inflation returned its target range of $5\% \pm 1$ pp for only one month before breaching it yet again. The range is defined by the Monetary Policy Guidelines for 2021 and the medium term. Inflation peaked in the fall of 2021 and remains high. Inflation did not reach its target in 2021, as it was primarily driven by nonmonetary factors (tariff reform, global prices, the fallout from the pandemic, and more). The monetary transmission channel – or rather the weakness of it – also played a role.

The second year of the COVID-19 pandemic reaffirmed that in an unstable economy, it is important that the banking system remains stable, sufficiently capitalized, liquid, and profitable. Fortunately, the economic crisis caused by the spread of COVID-19 did not disrupt the stability of the banking system. A significant margin of financial resilience and lending potential was preserved, regulatory capital reached a historical maximum, and profitability grew significantly.

As we expected, our cooperation with our international partners in 2021 resumed, resulting in significant credit support from the IMF, the EU, the World Bank, and other international stakeholders. These funds shored up the external sustainability of public finances, helped unblock Ukraine's access to the global financial markets, and made it possible to achieve a significant portion of the state budget goals.

Public support for lending continued. The Ukrainian president's initiative to stimulate lending to small and micro businesses was successfully upheld in 2021 through a program that reimbursed banks some of the interest on their loans, and through package guarantees for new investment projects. This allowed businesses to borrow under the Affordable Loans 5%–7%–9% program, resulting in the authorized banks lending about UAH 80 billion via almost 30,000 loans. Thanks to public guarantees being made on a portfolio basis, the banks were able to grant almost UAH 7 billion through more than 2,000 loans.

The launch of the mortgage lending program inspired hope in millions of households that they could improve their living conditions.

The reporting year marked the 5th anniversary of the NBU Council. Though unremarkable by historical standards, in Ukrainian terms this can be seen as something of an achievement. After all, our team has over the past five years worked with three NBU Governors, three prime ministers, and four ministers of finance.

Members of the NBU Council take pride in knowing that since the establishment of the NBU Council, all of their activities have been aimed at supporting the regulator's pursuit of its mandate, which is to achieve and maintain price and financial stability in Ukraine. Incidentally, the first decisions taken by the NBU Council concerned the drawing up of Monetary Policy Guidelines and ensuring their implementation (November 2016). It is the current composition of the NBU Council that inspired a tectonic shift in the NBU's activities, with the central bank making the transition to inflation targeting – a monetary regime it had never pursued before.

In 2016–2021, the NBU Council held more than 60 meetings, making approximately 250 decisions. The key documents adopted annually by the NBU Council include: The Monetary Policy Guidelines for the next year and the medium term; the NBU's administrative expenditures budget; and the NBU's Consolidated Financial Statements for the reporting year, as confirmed by an external audit. The NBU Council also approved the central bank's Monetary Policy Strategy, which ensures that monetary policy remains consistent and that its goals and principles do not change.

Incidentally, the state has a tangible effect on the NBU Council's activities. Not only can this impact be assessed by means of qualitative estimates, but it can also be quantified. On the recommendation of NBU Council, the NBU Board revised its procedures for the formation and use of the regulator's equity reserves. As a result, the central bank freed up UAH 2.1 billion in 2017 and UAH 5.2 billion in 2019, boosting the profit that goes towards the State Budget of Ukraine. This allowed the NBU to save UAH 332 million in costs in 2017, UAH 1.4 billion in 2018, and UAH 590 million in 2019. Upon reviewing the estimate of the central bank's administrative expenses in 2020, the NBU Council reduced the expenditures planned for 2021. Specifically, guided by the viability of expenses and their compliance with the NBU's mandate, the NBU Council agreed the estimated expenses for 2021 with the NBU Board, and cut them by UAH 103 million.

At the same time, the actions of the NBU Council in no way limited the NBU's financial independence. The NBU Board had sufficient financial resources to discharge its duties, implement relevant programs, and ensure an appropriate level of remuneration.

The Verkhovna Rada of Ukraine passed amendments in 2021 to the Law of Ukraine On the National Bank of Ukraine, clarifying the NBU's powers, and the status of its working bodies, as well as changing some of the regulator's procedures.

I am convinced that, going forward, coordinated efforts of the NBU Council and the NBU Board will help us achieve price and financial stability, as well as economic recovery.

We have every possibility of accomplishing this.

Glory to Ukraine!

NBU Board



Kyrylo SHEVCHENKO
Governor

Governor of the National Bank of Ukraine since 20 July 2020.

Governor of the National Bank of Ukraine manages the NBU's activities and, specifically, provides overall leadership for the areas, such as legal support, risk management, HR management, communications, internal audit, protection of the rights of consumers of financial services, security, keeping state secrets, and preventing and detecting corruption.

Kyrylo Shevchenko has been working in the financial sector for 28 years, including more than 11 years in the field of public finance. In 2009–2010 and then again in 2014, he worked as the First Deputy Chairman of the Management Board of Ukrgasbank JSB. In May 2015, he was elected as Chairman of the Management Board of Ukrgasbank JSB. From 2012 to 2014, Mr Shevchenko was an advisor to the secretariat of the chair of the management board at Oschadbank PJSC.

Before that, he chaired the management board of SKPD PrJSC (2012) and the management board of Ukrainian Strategic Group PrJSC (2011). In 2009, Kyrylo Shevchenko was an advisor to the Prime Minister of Ukraine. Between 2006 and 2009, he was the head of the State Mortgage Institution. Prior to that, he worked at Aval bank and at Finance and Credit bank, where he became Deputy Chairman of the Management Board and First Deputy Chairman of the Management Board, respectively. He started his career in banking in 1994 as an economist at Kharkiv branch of Ukrainian Credit Bank.

Mr Shevchenko graduated from Simon Kuznets Kharkiv National University of Economics with a degree in accounting and business control and analysis, Drahomanov National Pedagogical University with a degree in ecology, and National Academy of Internal Affairs with a degree in law.

In 2021, Kyrylo Shevchenko received an award of FINANCIAL CLUB AWARDS by Financial Club in the nomination "Representatives of Government Bodies" based on the results of the Financial Recognition study (2021).



Kateryna Rozhkova
First Deputy Governor

First Deputy Governor of the National Bank of Ukraine since 15 June 2018.

Kateryna Rozhkova is responsible for managing the following areas: administrative support of the NBU, procurement and sales, accounting, financial controlling, problem assets resolution, and Corporate Nonstate Pension Fund of the NBU.

Kateryna Rozhkova has been working in Ukraine's banking system since 1998. For more than 22 years, she held management positions of a deputy head of division, head of division, head of office, director of Financial Department at Aval JSPPB, deputy chair, board member, and advisor to the chairman of the board at Erste Bank PJSC, deputy chair of the board at Finbank PJSC, and acting chair of the board at Platinum Bank PJSC. In 2009, she chaired the NBU's Offsite Supervision Department for half a year. Between 10 June 2015 and 17 January 2016, she held the position of director of the Banking Supervision Department at the NBU. Up until June 2018, Kateryna Rozhkova was a deputy governor of the NBU.

Kateryna Rozhkova graduated from Kyiv National Economic University with a major in finance and credit in bank management. She also holds a degree in International Business Management (MBA) from the International Institute of Management (IMI-KYIV).



Yuriy Heletiy
Deputy Governor

Deputy Governor of the National Bank of Ukraine since 27 July 2020.

Yuriy Heletiy is in charge of regulating monetary and FX markets, operations on managing liquidity of the banking system, liquidity support lending to banks and the Deposit Guarantee Fund, NBU Depository and corporate rights management, developing and updating the banking regulation and supervision methodology.

He has been working in the area of public finance since 2003. Before his appointment as a deputy governor of the National Bank of Ukraine, Yuriy Heletiy worked in the Ministry of Finance of Ukraine: from 2018 to July 2020 as a deputy minister and in 2015-2018 as director of the Financial Policy Department. During his time in the ministry, he focused on the strategic reform of state-owned banks, development of the markets of financial services and securities. His professional career started at the National Bank of Ukraine in 2003, where during 2003 - 2015 he went from serving as an entry-level economist to heading a unit in the Regulatory and Methodology Support of Banking Regulation and Supervision Department and the Methodology Department.

Yuriy Heletiy graduated from Ivan Franko National University of Lviv with degrees in international economic relations, translation, and law. He holds a PhD in Economics.



Yaroslav Matuzka
Deputy Governor

Deputy Governor of the National Bank of Ukraine since 17 September 2020.

Yaroslav Matuzka oversees bank and nonbank supervision, registration and licensing, financial monitoring of the banking system, inspections of banks and participants of the nonbank financial services market, supervision of the nonbank financial services market, registration, licensing, and other authorization procedures, and financial monitoring of the nonbank financial services market.

Before joining the NBU, he worked at CB Privatbank JSC since 2016, coordinating legal team of the bank's head office since 2018. In 2010–2017, Yaroslav Matuzka served on the supervisory board of Ukrgasbank JSB. In 2011–2014, he sat on the Audit Commission of Oschadbank JSC.

In 2008–2009, he led the legal functions at several privately owned investment companies. Ministry of Finance of Ukraine was where Yaroslav Matuzka made his first career steps upon graduation, going from category I lawyer to head of legal department in a matter of years (2001–2008, 2009–2016).

In 2001, Yaroslav Matuzka graduated from Vadym Hetman Kyiv National Economic University with a master degree in legal regulation of economy.



Oleksii Shaban

Deputy Governor

Deputy Governor of the National Bank of Ukraine since 7 August 2020.

Areas under his leadership include development and regulation of payment and settlement systems, management of the cash circulation system, information technologies, strategy and development of central bank and financial sector.

Oleksii Shaban worked in Ukraine's banking system for more than 26 years. Since February 2020, Oleksii Shaban served as director of the NBU Payment Systems and Innovative Development Department. Before joining the NBU, he had worked in CB PrivatBank JSC for over 24 years, where he was in charge of retail business and actively introduced new card and payment products, including through remote channels. From 2018 Oleksii Shaban was a member of PrivatBank's board.

In 1995, Oleksii Shaban graduated from the National Metallurgical Academy of Ukraine, with a degree in management of enterprises.



Sergiy Nikolaychuk
Deputy Governor

Deputy Governor of the National Bank of Ukraine since 23 July 2021.

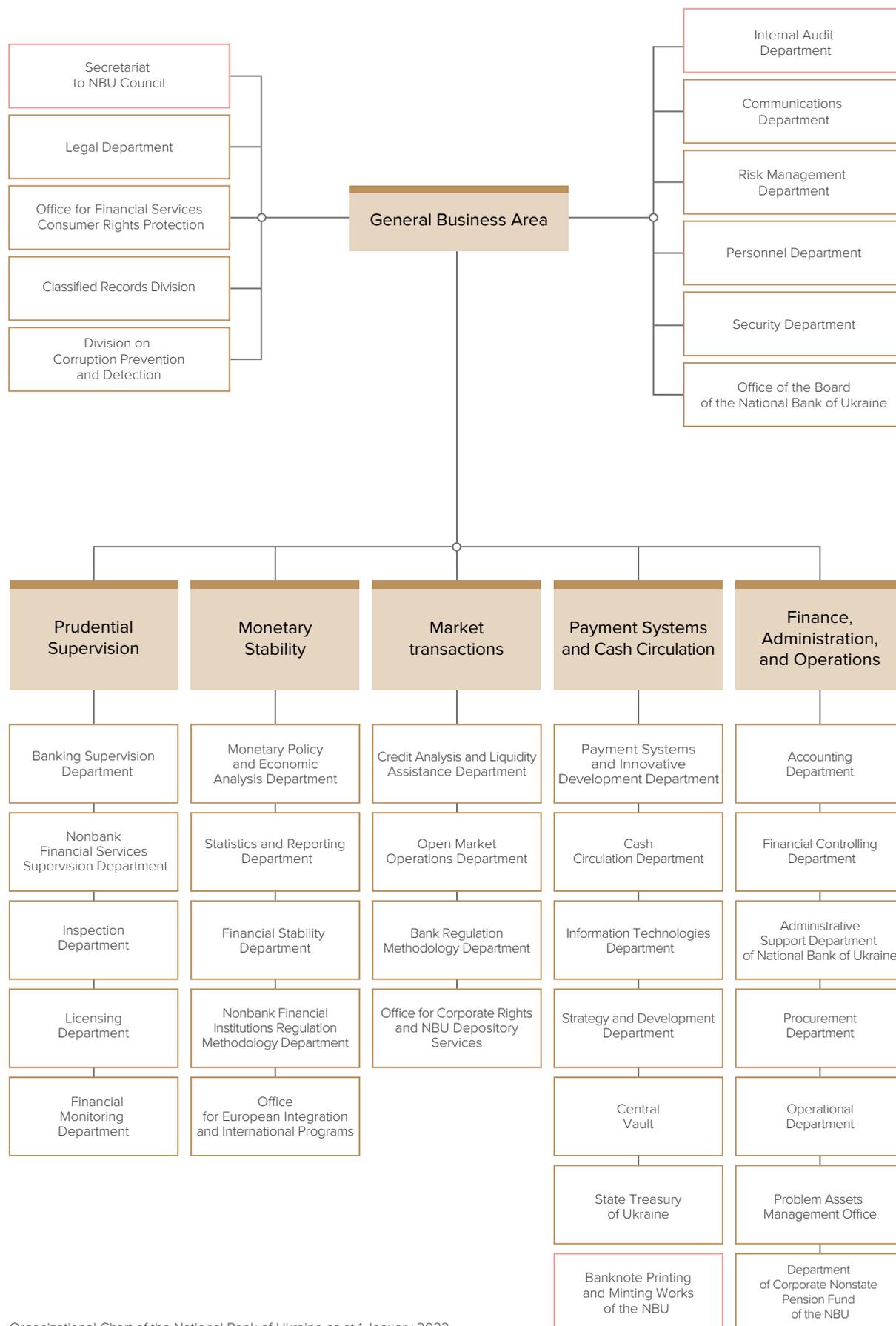
Sergiy Nikolaychuk is responsible for monetary policy, macroprudential analysis of the Ukrainian economy and its development, financial stability, statistics and reporting, NBU's international relations, and developing and updating methodology of the nonbank financial services market regulation.

Sergiy Nikolaychuk worked with the NBU from 2004 to 2019, making his way from an economist to the director of Monetary Policy and Economic Analysis Department.

From September 2019 to April 2020, he was the Deputy Minister of Economic Development, Trade, and Agriculture of Ukraine. From April 2020 to July 2021, Sergiy worked as the head of macroeconomic research department at ICU Consulting LLC. Sergiy Nikolaychuk is a research associate at Kyiv School of Economics and a professor at Taras Shevchenko National University of Kyiv.

In 2004, Sergiy graduated with distinction from Taras Shevchenko National University of Kyiv, receiving a master's degree in economics with a major in economic cybernetics. In 2008, at the same university, he presented his thesis titled Modelling the Transmission Mechanism of the Monetary Policy in Ukraine and was awarded his PhD in Economics.

Organizational Chart of the National Bank of Ukraine



Strategy of the National Bank of Ukraine 2025

In 2021, NBU Board approved by its Decision No. 412, dated 13 August 2021, the Strategy of the National Bank of Ukraine 2025 (hereinafter referred to as the Strategy). The Strategy is a road map for the NBU for the coming years. To maximize the value created by the NBU for Ukraine's society and economy, the new Strategy was developed on the basis of an analysis and detailed understanding of what the key participants of the financial ecosystem expect from the NBU. The NBU's key performance indicators correspond to the NBU's products, and are grouped into six components of the NBU's value proposition. Each component is disclosed in the following functional strategies, which were drafted in line with the updated approach to strategic planning:

- Strategy for Ensuring Price Stability in 2021–2024
- Strategy for Regulating the Financial Services Market in 2021-2024
- Strategy for Regulating Cash Circulation and Payment Systems in 2021-2024
- Strategy for Developing the Financial Ecosystem in 2021–2024
- Strategy for Organizational Development in 2021–2024
- Strategy for Developing Infrastructure and Corporate Administration in 2021-2024

The strategies are the basis for business planning in the NBU, and serve as bridges between its strategic and operational planning.

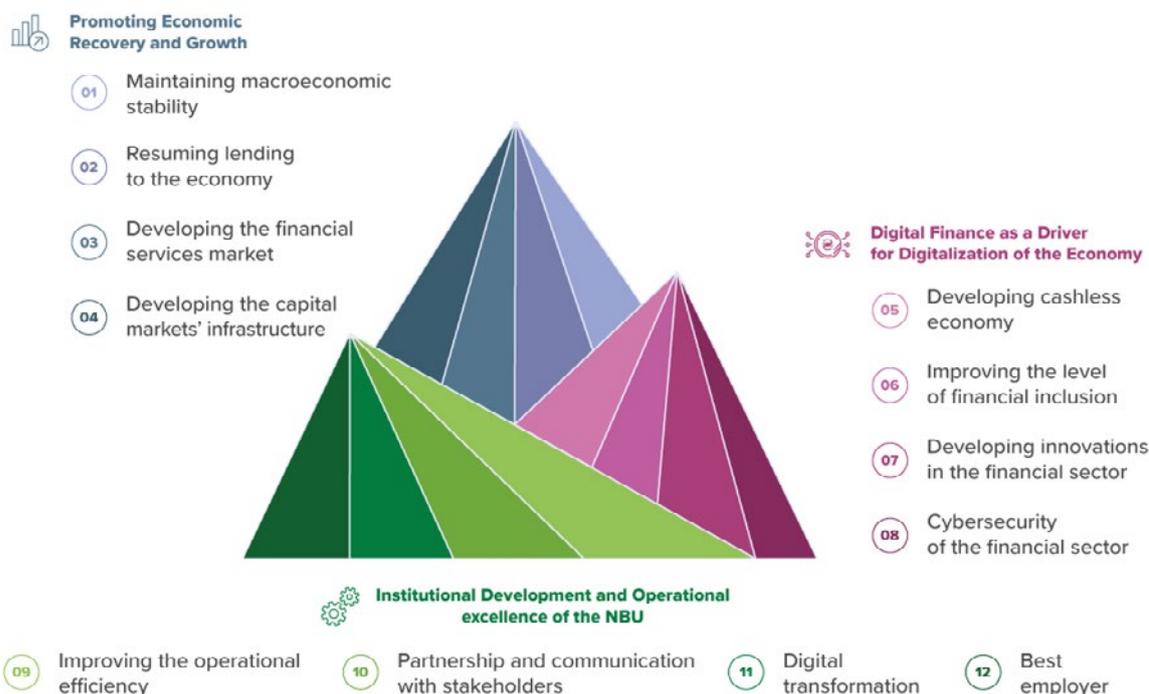
Based on a forecast analysis of global changes and patterns of activities of the key players in the Ukrainian financial system as they are driven by global trends in the coming years, the NBU has identified what its role will be in the next evolutionary stage of the Ukrainian financial ecosystem's development. The new Strategy thus rests on a re-envisioned role for the regulator in the financial ecosystem, and on the updated Vision of the NBU.

The NBU's Strategy has been harmonized with the principles and lines of the financial sector development set forth in the Strategy of Ukrainian Financial Sector Development until 2025, which was signed by the heads of the authorities involved in its drafting, and approved by their resolutions in the prescribed manner. The NBU Board approved this strategy with its Decision No. 1010, dated 26 December 2019, and updated it with Decision No. 97, dated 18 March 2021.

The NBU Strategy sets a range of controllable priorities. An effective and stable financial ecosystem requires that these priorities be met.

The Strategy has three pillars. The strategic areas, which are based on 12 strategic goals, address the evolution of the role the NBU plays in the Ukrainian economy, the central bank's impact on the financial eco-system, and internal transformations in the institution.

NBU's Strategic Pillars and Goals towards 2025



Pillar 1. Promoting Economic Recovery and Development:

- Goal 1. Maintaining macroeconomic stability
- Goal 2. Resuming lending in the economy
- Goal 3. Developing the financial services market
- Goal 4. Developing the capital markets' infrastructure

Pillar 2. Digital Finance as a Driver for Digitalization of the Economy:

- Goal 5. Development of the cashless economy
- Goal 6. Improving the level of financial inclusion
- Goal 7. Developing innovations in the financial sector
- Goal 8. Cybersecurity of the financial sector

Pillar 3. Institutional Development and Operational Excellence of the NBU

- Goal 9. Improving Operational Efficiency
- Goal 10. Partnership and Communication with Stakeholders
- Goal 11. Digital transformation
- Goal 12. Best employer

In response to the global economic crisis and local economic problems in Ukraine, the first strategic pillar – promoting economic recovery and growth – aims to help the country overcome the effects of the coronavirus crisis, which has caused the deepest global economic recession in a century, threatening public health and well-being, and disrupting economic activity. Clear answers to macroeconomic, monetary and financial policy issues will support financial eco-system participants and maintain the pace of financial services development, while also minimizing economic losses.

Digitalization is rapidly changing and reshaping the economy and society, stimulating entrepreneurial innovations, productivity and economic growth. The NBU is also involved in digital transformational processes in the financial sector. In response to challenges related to the digitalization of everyday activities, the economy and finance, the second strategic area – digital finance as a driver of a digitalized economy – aims to stimulate productivity and employment and boost the competitiveness of economic sectors, laying the foundations for Industry 4.0 in Ukraine.

The NBU needs to continue its efforts to develop the institutional capacity and independence of the organization, increase its achievements, act proactively among policymakers and market

players, retain talented staff, and attract the most talented people to the central bank's team.

This requires ongoing internal transformation at the NBU. That is why the third strategic pillar – the NBU's institutional development and operational excellence – aims to improve the implementation of the central bank's Mission and Vision through carrying out internal changes.

To assess the progress made in implementing the Strategy, the NBU monitors target indicators of its strategic goals. By monitoring progress, the NBU's management obtains data to make informed and justified management decisions, including decisions on adjusting the lines of development, changing the methods of achieving the Strategy's goals, or amending the functional strategies of the NBU and the operational plans of its subdivisions.

Achievement of the strategy's goals will be evidenced by the following:

- The central bank remains committed to a prudent monetary policy, inflation targeting, and a flexible exchange rate.

- Supervision over banks and nonbank financial institutions is effective and in line with EU standards.
- Lending is resumed at a level that supports economic growth.
- The remaining restrictions on the free movement of capital are lifted.
- Individuals become more involved in using financial services.
- Legislation for the payment market is in place and promotes innovations in the market.
- The financial sector is resilient to cyber threats.
- The NBU decides to launch the e-hryvnia.
- The NBU enhances its operating performance and embarks on digital transformation.

Transparency of the Strategy is essential for our activities to be understood and trusted by society. We are sure that this openness will unite all market participants in constructive team efforts.



Promoting Economic Recovery and Development



GOAL 1.**Maintaining Macroeconomic Stability****Achieving and Maintaining Price and Financial Stability is Mandatory For Economic Growth to be Sustainable**

The NBU's priority is to attain and maintain price stability, i.e. low and stable inflation. The [NBU's Monetary Policy Strategy](#) and the [NBU's Monetary Policy Guidelines](#) define price stability as achieving the medium-term inflation target of 5% with permitted deviations of ± 1 pp.

The NBU's monetary policy should also contribute to achieving financial stability and maintaining sustainable economic growth, which are the NBU's second and third goals in terms of priority. A low and stable inflation environment in tandem with a floating exchange rate help to achieve the financial stability goal. Financial stability is also a precondition for the proper functioning of the monetary transmission mechanism, therefore being an important factor in monetary policy effectiveness. Financial stability objectives are mainly attained by using micro- and macroprudential regulation and supervision tools. The NBU applies monetary tools to support financial stability only in cases when systemic risks and difficulties in the operation of financial markets significantly affect, or could significantly affect, inflation and economic activity.

A stable and predictable economic environment is a key requirement for ensuring sustainable economic growth in the long-run. That is why the NBU seeks to deliver a low and stable inflation environment by conducting a consistent, predictable and transparent monetary policy. The central bank uses the flexibility of inflation targeting to the greatest possible extent and deploys monetary tools in order to balance the goal of bringing inflation back to its target over the acceptable policy horizon against the goal of promoting economic growth. The NBU also strives to maintain inflation expectations at a low and stable level, which are required for ensuring low interest rates on loans.

In 2021, as expected, inflation in Ukraine was above its 5% ± 1 pp target range, driven by external and internal factors. The higher inflation was a global trend, which resulted mainly

from the rapid recovery of aggregate demand, fueled by large-scale fiscal and monetary stimuli, as well as from disruptions in global production and supply chains in the wake of quarantine restrictions. In particular, this led to a sizeable increase in energy prices and the prices of raw materials and components. Measures to cut emissions put additional pressure on prices. The said global factors spurred inflation in Ukraine as well.

Internal drivers also fueled inflation in Ukraine. They included robust consumer demand, which in contrast to previous crises revived rapidly, propped up by higher household income and improved consumer sentiment. Second-round effects from rising commodity and energy prices and higher labor costs gradually affected more and more goods and services. In addition, the information environment deteriorated at the end of last year amid geopolitical tensions, which were hard to predict. This started to have an impact on prices.

Overall, in spite of the difficulties, the NBU managed to achieve positive results.

Unlike many other central banks, the NBU was able to reverse the upward trend in consumer prices in Ukraine. In October, inflation started to decelerate, hitting 10% per annum in late 2021. The gradual decline in inflation resulted, among other things, from the NBU's proactive monetary policy, the strengthening of the hryvnia throughout most of the year, record-high harvests, price corrections in some global commodity markets, and administrative restrictions on utility rates for households.

The NBU was also able to keep inflation expectations under control. The NBU's consistent, transparent and predictable monetary policy helped make short- and medium-term inflation expectations more balanced. Overall, over the six years that have passed since the NBU started targeting inflation, the short- and medium-term inflation expectations of all respondent groups have improved, while also becoming more rational and anchored. When forming their expectations, economic agents started to rely more on the NBU's inflation forecast than on the latest price movements.

Naturally enough, inflation expectations increased in the latter half of 2021 on the back of rising inflation and higher risks. At the same time, this increase was moderate, given that in the period before the introduction of inflation targeting such inflation shocks could unbalance inflation expectations for a long time.

The NBU was able to retain the public's confidence in the hryvnia. The dedollarization trend continued in 2021: over the year the share of FX loans contracted from 36.7% to 28.9%, while that of deposits shrank from 37.7% to 32.4%.

Over the year, the banking system remained stable, well-capitalized, liquid, and profitable. In 2021, the banks generated record-high profits of UAH 77.5 billion, which was two times more than last year. Return on equity rose to 35%. The banks' large profits enabled them to build capital buffers, while also actively lending to the economy. The NBU supported the public's confidence in the banking system and helped ensure financial stability.

Using the flexibility of the inflation targeting regime to the greatest possible extent, the NBU conducted an accommodative monetary policy throughout most of the year, with a view to putting the economy back on the path to growth. Loose monetary conditions helped revive bank lending: 2021 saw the highest growth in the banks' loan portfolio since 2013. Corporate and retail lending expanded by about 40% yoy each. According to Ukraine's State Static Service, real GDP grew by 3.4% in 2021.

Taking Monetary Policy Decisions to Achieve Inflation Targets over the Policy Horizon

Deploying Monetary Tools to Deliver Price Stability

The NBU continued to conduct a proactive monetary policy. The NBU was guided by the most probable (baseline) scenarios of macroeconomic forecasts, and took monetary decisions to keep inflation expectations under control and to bring inflation back to its target over the policy horizon (nine to 18 months).

The NBU was under no illusion that inflation would not speed up in 2021, or decrease by itself over time. In mid-2020, the NBU stopped cutting its key policy rate in view of the expected increase

in inflationary pressures over the policy horizon. At the same time, in its official communications, the central bank warned in advance that inflation would deviate from its target in 2021 and that there would be an appropriate monetary response. In July and October 2020 and in January 2021, the projected trajectory of the key policy rate showed that the rate would increase in 2021. And in March 2021, the NBU was among those few central banks that started a monetary policy tightening cycle. At the same time, the NBU strived to be as flexible as possible, by balancing its decisions to raise the key policy rate against the need to contribute to post-pandemic economic recovery.

However, in late 2020 and in early 2021, it was difficult to predict in macroeconomic forecasts the extent of the impact of a number of pro-inflationary factors, such as: increased geopolitical tensions; persistently high energy prices (including for political reasons) and food prices (including due to global crop failures); how the pandemic would pan out; that there would be a significant increase in labor market imbalances; the speed at which demand will recover after the crisis; and that disruptions in global production and supply chains would remain. The surge in global inflation also happened to be more substantial and longer-lasting than expected by leading central banks and international financial institutions. Inflation in advanced economies was the highest in several decades. Sustained monetary and fiscal stimuli in the largest economies intensified global pressures on prices.

The materialization of pro-inflationary risks and the increase in these risks over the policy horizon forced the NBU to revise upwards the forecast trajectory of inflation and, consequently, to produce a flexible monetary response to rapidly changing circumstances. Despite the January forecast predicting that the key policy rate would be kept at 7%, in 2021, the key policy rate was increased by a total of 3 pp, from 6% in January to 9% in December.

With a view to strengthening monetary transmission and insuring that all of the used monetary instruments are in line with the monetary policy stance, the central bank gradually phased out stimulating anti-crisis measures – long-term refinancing and interest rate swaps. As expected, these instruments provided additional support to the banking system and lending during

the most difficult period of the crisis and at the early stage of economic recovery. However, they became irrelevant when the economy returned to steady growth. The prudently implemented phasing out of anti-crisis instruments had no adverse

impact on either the banks or the economy. Additionally, this decision helped increase the NBU's ability to control inflation. Also, the NBU normalized the operational design of its monetary policy to increase the effectiveness of monetary transmission.

Changes in Monetary Policy in 2021

Gradual increase in the key policy rate from 6% to 9%	← Main instrument
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– four hikes, by a total of 300 bp, in view of stronger underlying inflationary pressures

Phasing out and then cancelling anti-crisis monetary measures	← Enhancing the effect of key policy rate increases
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[Phase 1](#) (July): decreasing the terms and volumes of long-term refinancing, and reducing the frequency of auctions and shortening the maximum maturity of interest rate swaps.

[Phase 2](#) (October): cancelling long-term refinancing and interest rate swaps.

Stepwise normalization of the operational design of monetary policy	← Improving the effectiveness of monetary transmission
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– the maturity of certificates of deposit was increased from seven to 14 days [from July](#)

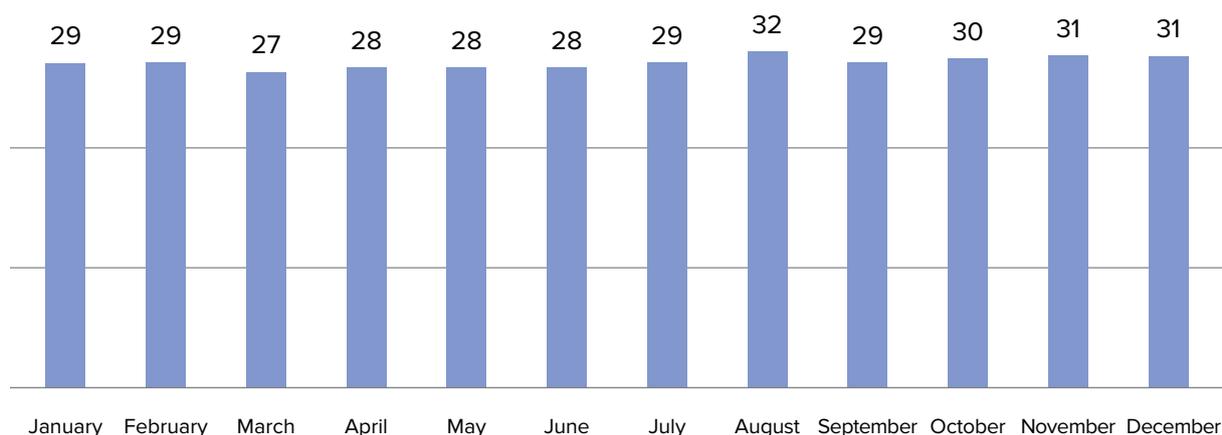
– the interest rate on refinancing loans was set at the key policy rate + 1 pp [from 23 July](#)

– the maturity of refinancing loans offered in weekly tenders was reduced to 30 days, down from 90 days [from October](#).

The NBU also remained committed to the flexible exchange rate regime. Among other things, the central bank neither counteracted underlying FX market trends nor intensified them. It merely smoothed out ad-hoc undue exchange rate fluctuations that could have unbalanced expectations and depressed economic growth. Favorable conditions for Ukrainian exports, along with the growth in labor migrant remittances and FX earnings from exports of IT services, generated underlying revaluation pressures. The strengthening in the hryvnia throughout most of the year reined in inflation in imported goods (mainly non-foods).

Despite there being large payments of external liabilities, international reserves in late 2021 hit a nine-year high – USD 30.9 billion or 3.8 months of future imports, making up 95% of the required minimum according to the IMF's ARA metric. In 2021, international reserves were mainly replenished through the Ukrainian government receiving USD 7.8 billion (in the equivalent), the NBU's net FX purchases of USD 2.4 billion on Ukraine's interbank FX market, and the arrival of IMF loans of USD 3.4 billion (in the equivalent).

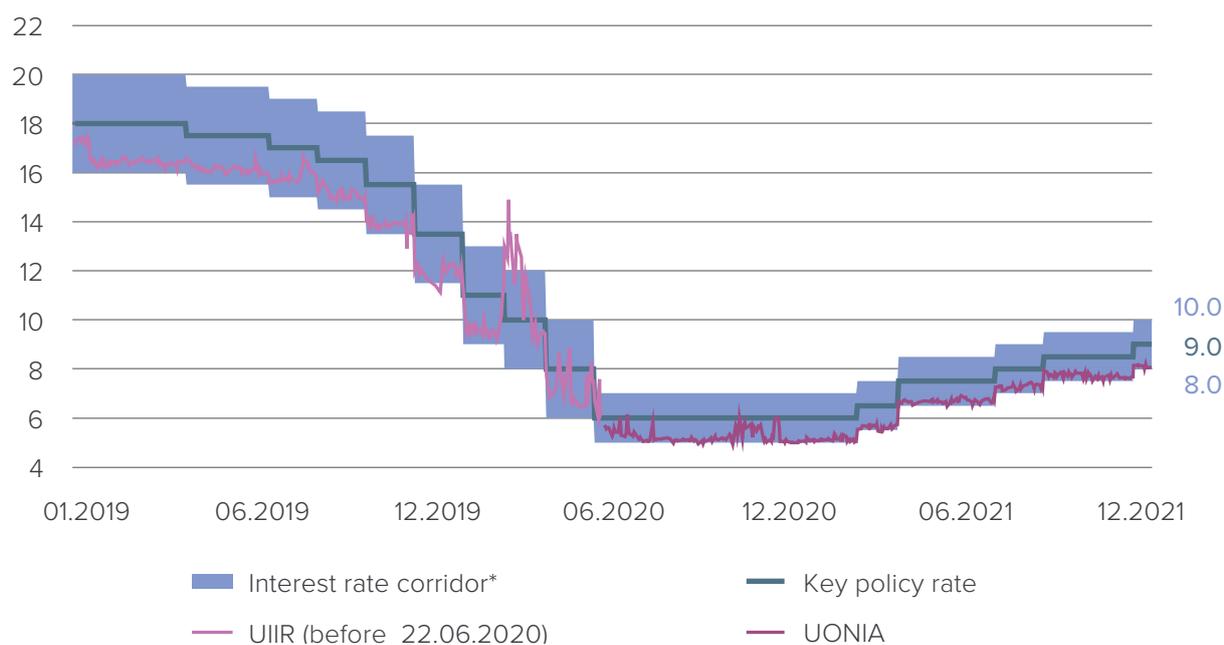
International (foreign exchange and gold) reserves of Ukraine in 2021



International reserves were mainly managed with a view to ensuring an optimum ratio between security, liquidity and profitability, which enabled the NBU to perform its statutory functions.

In 2021, international reserves were managed according to Ukraine's international reserve investment declaration for 2021.

NBU interest rates and UIIR/UONIA, %



*Interest rates on the NBU's overnight loans are the upper bound of the corridor, with interest rates on the NBU's overnight certificates of deposit being at the lower bound of the corridor.
Source: NBU estimates.

The Effectiveness of Monetary Policy Transmission

The NBU influences the financial market, the economy and, among other things, inflation by changing interest rates on hryvnia instruments.

In 2021, the key policy rate was transmitted into market rates at a varying speed.

More specifically, interest rates on the interbank lending market rose throughout 2021, as usual

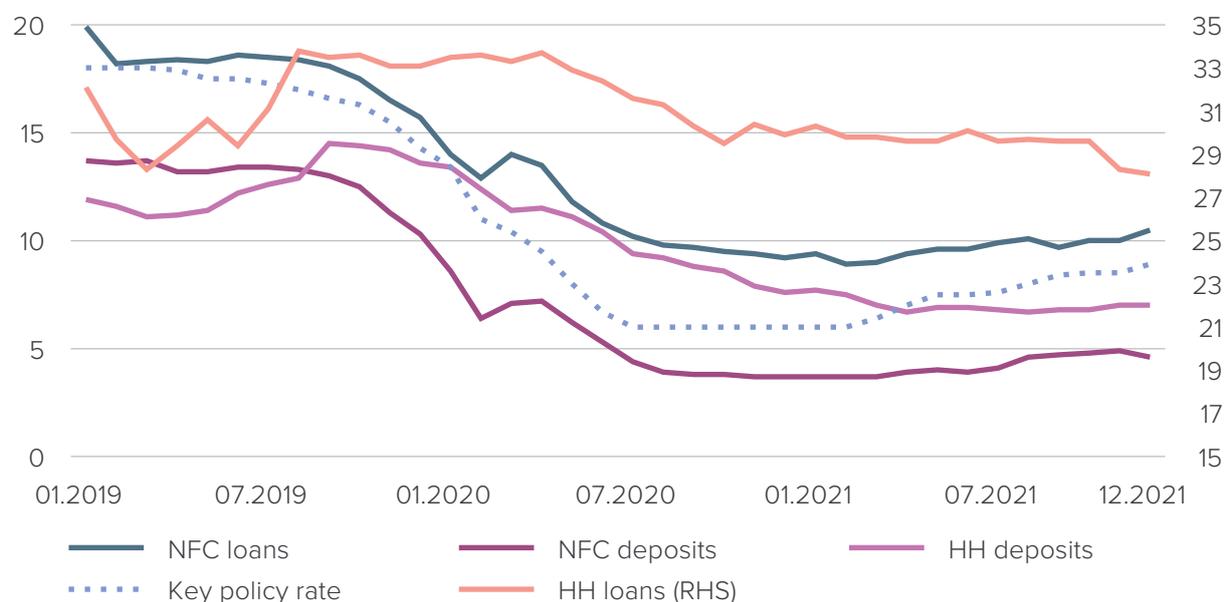
correlating most closely with the changes in the key policy rate. Sustained high liquidity in the banking system kept the UONIA close to the lower bound of the NBU's interest rate corridor.

Interest rates on bank loans and deposits also responded to the key policy rate increase. More specifically, the weighted average interest rate on hryvnia loans to nonfinancial corporations increased from 9% in March (when the monetary policy tightening cycle started) to 10.5% in December.

Interest rates on household loans responded more slowly. Rates on hryvnia deposits from households responded moderately and with a significant lag on the back of market-driven factors (such as a substantial amount of liquidity

in the banking sector, and a sluggish response from state-owned banks). Conversely, interest rates on corporate deposits responded more quickly amid stiff competition for customers.

Weighted average interest rates on new hryvnia loans and deposits, %

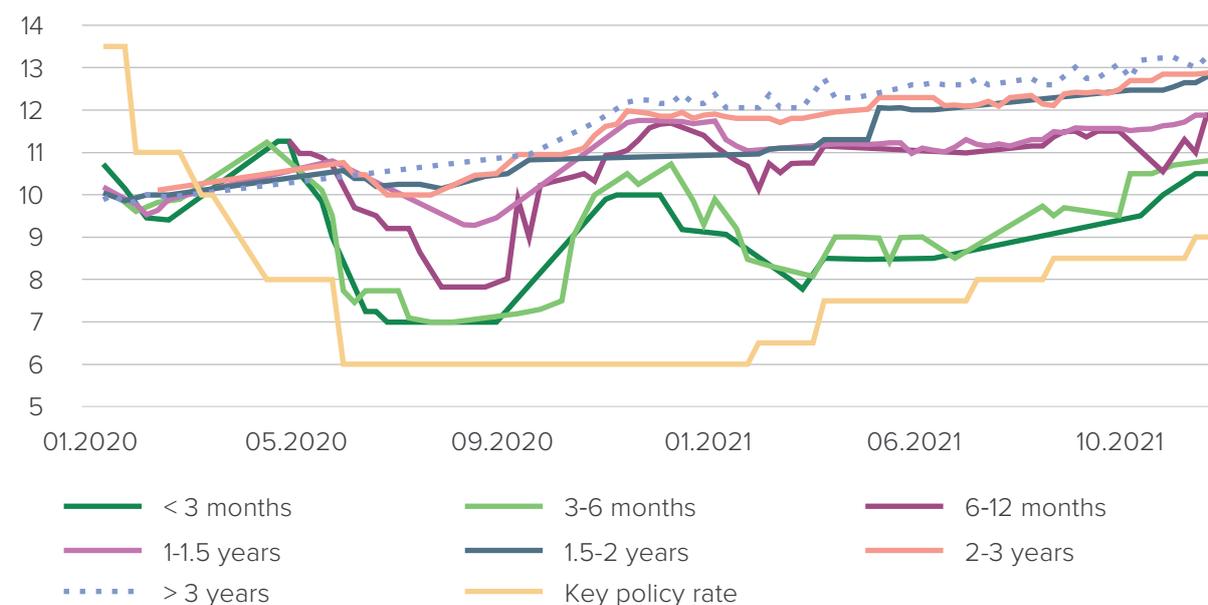


Source: NBU estimates.

Worsening inflation expectations, including domestically, in late 2021, coupled with tighter global monetary conditions, pushed up yields on hryvnia domestic government debt securities.

The government's large financing needs, together with a deteriorating information environment due to the geopolitical tensions seen in the later months of 2021, also played a role.

Primary market yields on hryvnia domestic government debt securities by auctions, % per annum



Source: NBU estimates.

Raising Trust in the Monetary Policy

In August 2021, the NBU celebrated the sixth anniversary of its monetary policy, which is based on inflation targeting. Six years ago, in August 2015, the NBU Board approved the Monetary Policy Strategy 2016–2020, which for the first time set a 5% medium-term inflation target and a trajectory for gradually approaching the target, as well as the principles of inflation-targeting monetary policy.

In December 2016, the NBU Council approved the [Monetary Policy Guidelines for 2017 and the Medium Term](#), which formalized the set goals and principles of monetary policy, as well as plans to reduce the inflation target to 5% from the end of 2019, allowing deviations of ± 1 pp. The document also envisages that further on the NBU would only be able to revise the target downward, and only if the hryvnia exchange rate becomes less volatile, relative prices decrease, and the effects of the Ukrainian economy's convergence with the country's main trading partners weaken.

From the moment that the NBU switched to the inflation targeting regime in August 2015, the quantitative targets for inflation and the principles of inflation-targeting monetary policy have not changed, and have been reiterated in annual Monetary Policy Guidelines. They were also confirmed by the [Monetary Policy Strategy](#) approved by the NBU Council in July 2018. This made the NBU's monetary policy more predictable, increased public trust in it, and reduced and stabilized the inflation expectations of various groups of economic agents.

Raising trust in the decisions and actions of the central bank requires maintaining the institutional, financial, and operational independence of the NBU. Thanks to joint efforts by the NBU and the Verkhovna Rada of Ukraine, important amendments were made to the Law of Ukraine *On Banks and Banking* in October 2021. The amendments improved the NBU's internal governance, including the procedure for interactions between the NBU Council and the NBU Board. The adopted amendments comply with best practices of corporate governance and global management standards for central banks, and reinforce the institutional and financial independence of the NBU.

The NBU also remained committed to avoiding any forms of fiscal dominance over monetary policy. This commitment was reflected in the [Monetary Policy Guidelines for 2021 and the Medium Term](#).

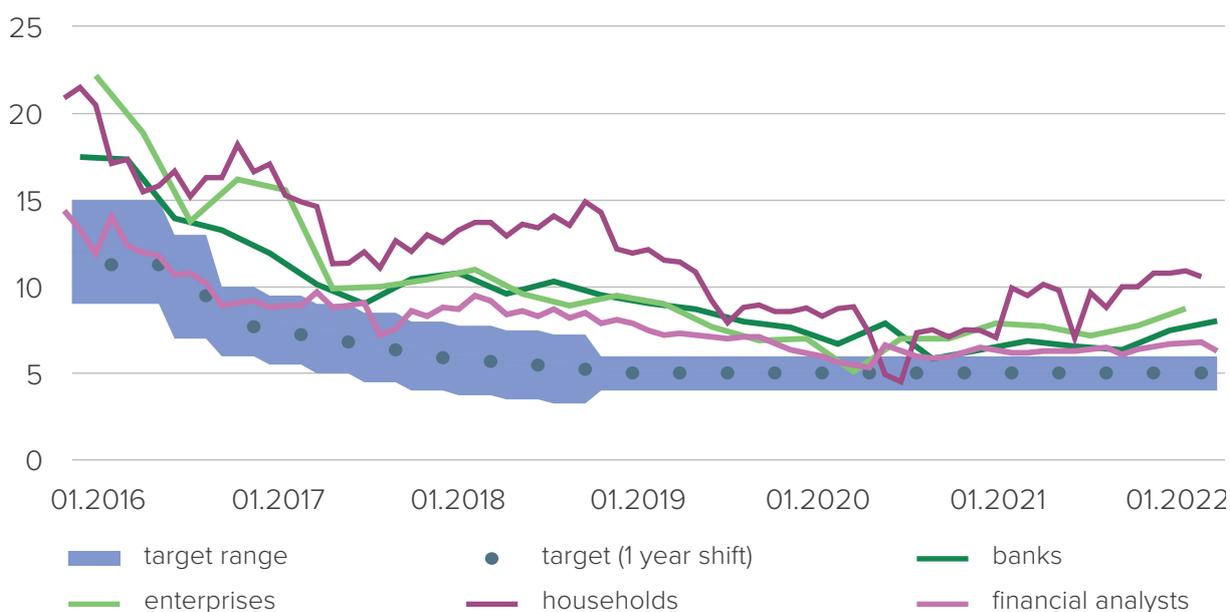
For the effective anchoring of inflation expectations of households, businesses, and financial analysts at the inflation target level, it is important that economic agents are confident in the NBU's capability to attain the target, and that they trust its decisions. Therefore, the NBU paid special attention to the transparency of its monetary policy, explaining in detail to various target audiences its monetary policy decisions and their effects.

The NBU takes monetary decisions according to a well-defined and unchanged procedure, in line with a schedule.

Monetary policy decisions were taken collegially, and information about the NBU bodies and committees engaged in the discussions and decision making remained open to the public. The NBU announced its monetary policy decisions to the public regularly at the same time, according to the principle of equal access to information. The central bank explained the reasons for its decisions and shared the future path of its monetary policy. The NBU is one of nine inflation targeting central banks that publish key rate forecasts; the key policy rate is the NBU's main monetary policy instrument. The quarterly publication of the key policy rate forecast in the Inflation Report allows economic agents to understand the further direction of the NBU's monetary policy, which is important for taking rational investment and consumer decisions.

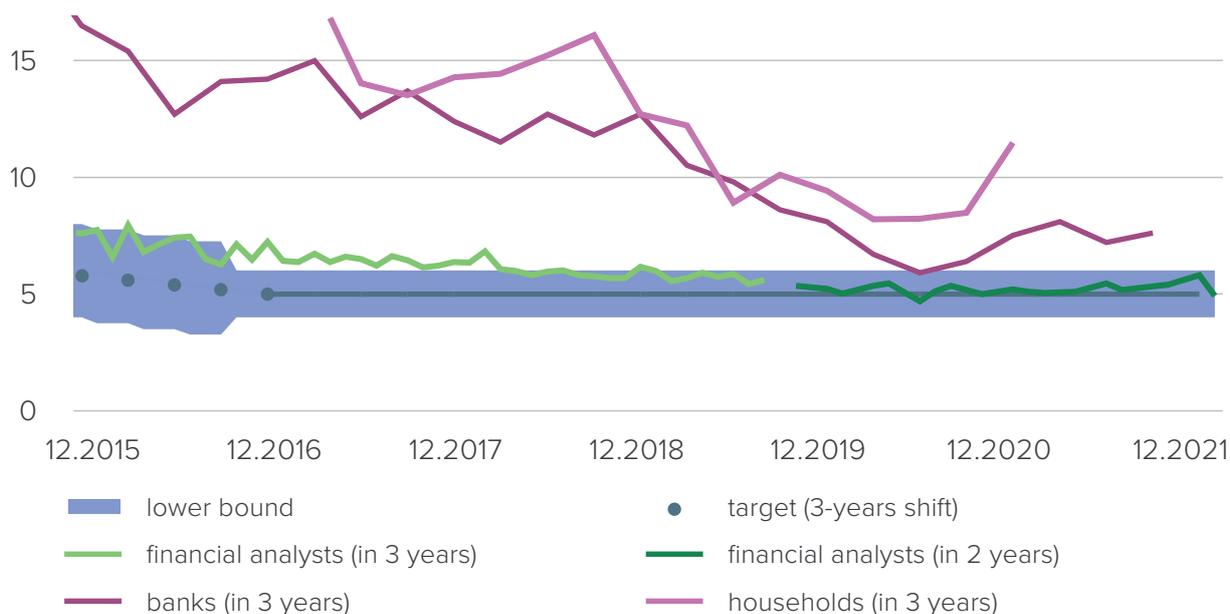
When inflation expectations are close to the central bank's inflation target, it is a sign of trust in the monetary policy under the inflation targeting regime. In 2021, the short-term inflation expectations of financial analysts were the closest to the target range (6.1%–6.8%). The expectations of companies and bank credit managers were below the current inflation level (6.4%–8.7%). Households continued to have the most volatile and divergent short-term inflation expectations (7.0%–10.9%), which is common even in countries with a long track record of inflation targeting. At the same time, households' short-term expectations were lower than the perceived current inflation, reflecting expectations of further disinflation.

Short-term inflation expectations



Source: NBU, GfK Ukraine, Info Sapiens.

Medium-term inflation expectations

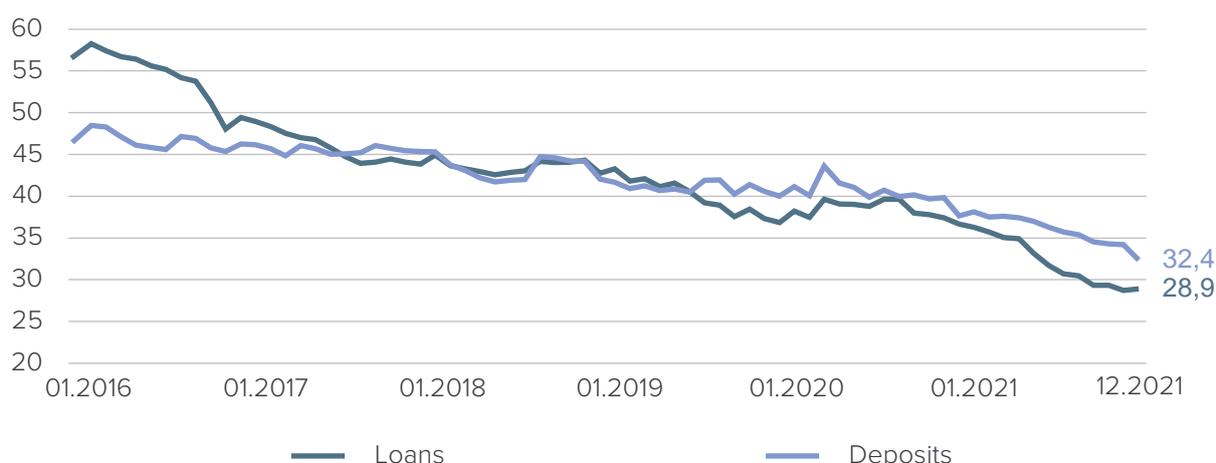


Source: NBU, GfK Ukraine, Info Sapiens.

The medium-term inflation expectations of financial analysts became more stable over time, and the range of their fluctuations narrowed. Starting H2 2019, medium-term expectations have been generally in line with the NBU target. Despite a weakening in late 2021, analysts' medium-term inflation expectations remained relatively well-anchored compared to the earlier period.

The central bank's commitment to achieving the inflation target also raises trust in the domestic currency. Since inflation targeting has been implemented, the dollarization rate of loans and deposits has decreased markedly.

FX loans and deposits, %



In order to enhance understanding of monetary policy and raise trust in the decisions it takes, the NBU was constantly improving its communications with the public, trying to provide complete and clear explanations of monetary policy measures and results. The NBU is applying a multi-tier approach to target audiences that have different levels of economic literacy, choosing the right words for each audience. In order to better explain the rationale and effects of monetary policy decisions to the wide public, the NBU is creating adapted content and developing the visual component of its communications. Along with using conventional communication channels (official website, mass media publications) to reach out to its target audiences about its monetary policy, the NBU also continued to actively develop its social networks in order to maintain direct and two-way interaction with households.

A number of research events organized by the NBU have also helped raise trust in the monetary policy, including¹:

- the annual research conference The Policy Toolkit for a World in Flux (10, 11 June 2021). Keynote speakers: Alan Blinder (Princeton University) and Mikhail Golosov (University of Chicago)
- the research workshops Big Data in Macroeconomic Analysis: Collection to Visualization (23, 24 February 2021) and Inflation Targeting in Emerging Markets (26 November 2021)
- open research seminars (15 seminars)
- a conference for students and young

scientists Banking Sector and Monetary Policy: Development Prospects (21 May 2021)

- the contest Monetary Policy: NBU University Challenge (3 December 2021)

In order to explain and support economic policy decisions aimed at maintaining macroeconomic stability and improving the effectiveness of monetary policy, the NBU in 2021 continued the majority of its research projects in monetary policy, financial stability, and macroeconomic modelling and forecasting. New important topics have also appeared for the central bank to research.

Out of more than 30 ongoing projects carried out in 2021, it is worth noting those that had the most important results and that were published in peer-reviewed journals or other reputable publications. These research projects covered:

- the impact of monetary policy shocks on aggregate consumption (Ghassibe, M. (2021). *Monetary Policy and Production Networks: An Empirical Investigation*. *Journal of Monetary Economics*, 119, 21-39. <https://doi.org/10.1016/j.jmoneco.2021.02.002>)
- the relation between wages and unemployment at the micro level based on online vacancies data (Faryna, O., Pham, T., Talavera, O., Tsapin, A. (2021). *Wage and Unemployment: Evidence from Online Job Vacancy Data*. *Journal of Comparative Economics*. <https://doi.org/10.1016/j.jce.2021.05.003>)

¹ To get the information about events and their main takeaways and conclusions, visit the links in parentheses..

- GDP gap decomposition (*Constantinescu, M., Nguyen, A.D.M. (2021). A Century of Gaps: Untangling Business Cycles from Secular Trends. Economic Modelling, 100, 105505. <https://doi.org/10.1016/j.econmod.2021.105505>*)
- price-setting factors on the lending market of Ukraine (*Shpak S. (2021). Determinants of Corporate Loan Interest Rate: Case of Ukraine. Visnyk of the National Bank of Ukraine, 251. <https://journal.bank.gov.ua/en/article/2021/251/01>*)
- calculating the financial stress index (*Filatov V. (2021). A New Financial Stress Index for Ukraine. Visnyk of the National Bank of Ukraine, 251 <https://journal.bank.gov.ua/en/article/2021/251/02>*)
- inflation and GDP forecasting (*Shapovalenko N. (2021). A BVAR Model for Forecasting Ukrainian Inflation and GDP. Visnyk of the National Bank of Ukraine, 251 <https://journal.bank.gov.ua/en/article/2021/251/02>*)
- estimating the neutral rate of interest (*A. Grui. Neutral Price of Money: The Way the National Bank Evaluates How Tight Its Monetary Policies Are <https://voxukraine.org/nejtralna-vartist-groshej-yak-nbu-otsinyuye-zhorstkist-svoyeyi-politikil>*)

Responding to new challenges, the NBU in 2021 updated its [research priorities](#) for the period until 2025. The NBU will focus its research on:

- raising the effectiveness of its monetary policy
- maintaining financial stability
- long-term challenges in the real sector
- developing digital markets, products, and their regulation.

Currency Liberalization

During 2021, the NBU continued to pursue currency liberalization within its regulatory mandate. The central bank's currency liberalization efforts have the ultimate goal of establishing the free movement of capital in Ukraine. However, some of the protective measures, known as anti-crisis restrictions, which were implemented in the FX market in previous years as part of a push to relieve the fallout from the spread of COVID-19, remain in effect.

The NBU therefore ensured there was a balanced and phased implementation of its currency liberalization program, in line with a previously

drafted [FX Restrictions Removal Roadmap](#), which takes into account the macroeconomic situation, the priority needs of businesses and consumers, and assessments of the potential impact of currency liberalization measures on demand for FX.

Specifically, in a bid to ease a number of FX restrictions in 2021, the NBU:

- canceled the ban on retail transactions for the purchase and sale of foreign currency on forward terms, as well as that on transactions to buy and sell foreign currency and investment metals under margin trading terms
- lifted the ban on bank swap transactions with resident individuals in which the first part of the transaction involves the sale of foreign currency or investment metals to a client
- allowed banks to make FX settlements in transactions to purchase FX-denominated government securities from resident individuals
- raised twofold, to the equivalent of EUR 200,000, the e-limit on the number of retail FX transactions to transfer funds abroad and into the accounts of nonresident legal entities opened in Ukraine
- extended the list of transactions on export and import of goods that are not subject to payment deadlines (365 calendar days as of now)
- expanded opportunities for citizens to invest abroad by granting permission to resident individuals to make relevant transactions with the participation of an investment firm
- allowed authorized institutions to buy and sell cash foreign currency to individuals for cashless hryvnias through the cash desks of the said institutions, their standalone units (including payment devices), and currency exchange offices
- allowed banks to carry out transactions to buy and sell investment metals with physical delivery to individuals for cashless hryvnias, as well as transactions to sell investment metals in the form of coins to legal entities
- enabled businesses to buy up to the equivalent of EUR 100,000 per day in foreign currency without stating the purpose, making commitments, or submitting supporting documents to the bank
- widened, from 10% to 15%, the limits for open long and short FX positions of banks.

As part of currency liberalization, in order to simplify the conditions for and reduce the cost of organizing the issue of Ukrainian companies' Eurobonds abroad, the central bank also:

- excluded from the list of transactions subject to the annual limit of the equivalent of EUR 2 million transactions to pay out income on Eurobonds and redeem them, as well as other transactions that the issuer has to carry out in connection with the issue of the said securities
- allowed Eurobond issuers to buy foreign currency so as to accumulate it on their accounts with Ukrainian banks ahead of repayments on such Eurobonds coming due.

Therefore, the NBU in 2021 both eased the most severe anti-crisis protection measures in terms of their impact on the FX market, and lifted or relaxed associated restrictions.

At the same time, each step in the currency liberalization effort was taken after assessments were made of the impact of the removal of previous restrictions on Ukraine's FX market as the macroeconomic situation improved.

As a result, the NBU's currency liberalization measures did not put additional pressure on the FX market, nor did they lead to supply and demand imbalances in this market.

The NBU's Business Outlook Surveys

In 2021, the NBU continued to be involved in systematic efforts to survey companies, banks, financial analysts, and financial services market participants. In view of the new challenges posed by the pandemic, the NBU had to intensify its two-way communications with market participants in order to understand how the market was responding to its signals, whether or not it finds the central bank's anti-crisis policies acceptable, how businesses' preferences have changed, how businesses intend to achieve these preferences and what goals they have set, and what structural changes are taking place.

Guided by the [Strategy of Ukrainian Financial Sector Development until 2025](#), in 2021 the NBU launched a new quarterly survey of funding sources, which provides additional high-quality information about generalized assessments of the banks' liabilities, facilitating the assessment of systemic risks and providing

a deeper understanding of changes in the banks' liabilities and capital.

The central bank also started posting survey time series in open data format, which can be accessed via an API, on the open data page of its official website with a view to enabling rapid information exchange among various target groups, making it more easy for researchers to conduct analyses and forecasts, making data more transparent, and boosting confidence in the NBU.

In order to maintain effective two-way communications with the business environment, the NBU continued to hold regular meetings with the heads of surveyed companies. Given the new reality of the last two years, the format of the meetings has changed to Zoom conferences. In 2021, two such meetings took place, with each bringing together over 70 company managers who represented almost all economic activities and regions in Ukraine. The meetings covered a wide range of issues, including

- economic development trends and outlook, and changes in lending to the economy
- the regulator's monetary policy under the inflation-targeting regime
- FX regulations
- the NBU's policies under quarantine restrictions
- financial monitoring
- a review of the nonbank financial services market, in particular the insurance market
- experience in using a mobile app for online business surveys.

An important event in 2021 was the 11th Annual International Conference on Central Bank Business Surveys (CBBS), which was held on 16–17 September in the NBU. The event attracted central bankers from 21 countries and the ECB, and enabled them to exchange experience in conducting business surveys, to present their results, and to discuss further plans.

As expected, the discussions focused on the impact of COVID-19 on businesses, the labor market, migration trends, consumer sentiment, and more. The pandemic has reshaped economic policy-making, leaving the global economy and central banks in an unprecedented situation that requires

new approaches to information gathering and analysis, among other things.

The participants from the NBU gave presentations about the impact of the media on respondents' expectations, as well as the use of mobile applications in online surveys of companies as an additional tool for optimizing data collection, increasing the number of respondents, and facilitating their access to important information.

The conference participants paid particular attention to the importance of understanding the nature of inflation expectations and estimating them accurately in order to anchor inflation expectations. Anchoring remains a key task for central banks that target inflation.

The participants again said that surveys of businesses by central banks help them to:

- understand the reasons for respondents' behavior, and more accurately measure their sentiment and expectations
- monitor changes in business habits, and businesses' plans and the ways they implement them
- develop, based on data analysis, effective economic policy tools to overcome

the crisis and ensure recovery and sustainable development

- ascertain in time how economic agents respond to their own decisions and actions.

The CBBS 2021 participants concluded that, judging by many parameters, the NBU conducts some of the highest-level surveys among central banks.

This was the first time this event had been held in a hybrid format. It showed that professional offline and online communications in times of COVID-19 can be productive. The new format allowed a record-large number of participants – over 90 people – to take part in the conference.

When wrapping up, the participants said that the conference would contribute to reinforcing market participants' confidence in central banks. Polls of economic agents conducted during the crisis reaffirmed the success of central banks' anti-crisis policies. In designing their economic policies and decision-making, central banks have been paying increasingly more attention to communications with the market, including through surveys. The new ideas highlighted by the conference will promote the further development of these important tools for collecting and analyzing information.

Goal 2.

Resuming Lending to the Economy

Development of Sustainable (Green) Financing

In 2021, the NBU developed the concept of environmental, social, and governance (ESG) instruments and green financing in Ukraine. In November 2021, the Sustainable Finance Development Policy 2025 (the Policy) and the roadmap for its implementation were [approved](#) as a result of the implementation of its policy for developing ESG and green financing in Ukraine (hereafter, the Policy). The Policy aims to shape the future landscape of sustainable financing in Ukraine. It contains a detailed description of tasks and instruments for bringing practices applied by financial institutions closer to global standards in integrating (ESG) factors into financial services. The provisions of the Policy have been discussed by both NBU units and key stakeholders, and approved between them. The Policy has also been presented to financial market participants.

Some steps of the Road Map had been already implemented as of the end of 2021. Specifically, amendments were made to the Methodological Recommendations for Organizing Corporate Governance in Banks of Ukraine (NBU Board Decision No. 628, dated 22 December 2021), which provide recommendations that assessments of the impact of ESG factors on the long-term resilience of a bank be carried out, and that a bank's supervisory board ensure that the environmental and social risk management system is integrated in the overall risk management framework.

The road map of the Policy implementation envisages:

- 1) the introduction of ESG factors in the corporate governance system of financial institutions (from the beginning of 2022 for banks, and from the end of 2024 for nonbank financial institutions)
- 2) environmental and social risk management (ESRM). The environmental and social risk management system will be integrated in the overall risk management framework of financial institutions (from 2023 for banks, and from the end of 2024 for nonbank financial institutions)
- 3) the assessment and selection of projects to be financed will take into account their role in sustainable development. When selecting projects to be financed, financial institutions will be required to assess their environmental impact, sustainability of economic activity, and energy efficiency. The NBU will develop recommendations for disclosing such information by the end of 2023 for banks, and by the end of 2024 for nonbank financial institutions.
- 4) the requirement for financial institutions to disclose information about the sustainability of their activities. Financial institutions will be required to disclose information about the sustainability of their activities, their impact on the environment, and the reputational and financial risks caused by their environmental impact. The NBU will develop recommendations for disclosing such information for banks by the end of 2023, and by the end of 2024 for nonbank financial institutions. Moreover, the NBU will closely monitor the compliance with these requirements from the start of 2024 for banks, and from the start of 2025 for nonbank financial institutions.

Goal 3.

Developing the Financial Services Market

State of the Banking Sector

The banking sector successfully adapted to working during the pandemic and performed its functions properly in 2021, supporting the economy.

The banks' sufficient liquidity and relatively low deposit rates bolstered depositors' trust, despite the cycle of increases in the NBU's key policy rate. The growth in lending accelerated, as interest rates on loans were single-digit throughout most of the year and the state offered support programs for businesses. The dollarization of bank account balances decreased. Clearing bank's balance sheets of nonperforming loans through writing them off improved the banks' investment attractiveness, especially that of the state-owned banks.

As of year-end 2021, the sector's profits were at an all-time high. The sector's average return on equity rose to 35%. Proper provisioning in previous years and conservative lending standards led to a decrease in credit risks. The high profitability of the sector enabled the further implementation of regulatory capital requirements while also allowing the banks to maintain their capital at a sufficient level.

Considering the economic recovery and continued stability of the banking system, in 2021 the NBU phased out its macroprudential policy easing measures, which were adopted at the start of the coronavirus crisis. This enabled the NBU to return to the path toward harmonizing requirements with European and global (Basel) standards and providing a proper response to current risks to the financial system. At the same time, the central bank wound down its long-term liquidity support to banks in H2.

The banks now have sufficient capital and liquidity to withstand external challenges. In order to maintain high profitability, they need to form suitable tariff policies, manage their portfolios, and optimize their levels of operating expenses. As geopolitical risks are rising, the banks will have to pay close attention to maintaining liquidity and managing their stocks of high quality liquid assets.

Banking Sector Structure

In 2021, one bank was declared insolvent after failing to comply with its obligations to its depositors and other creditors due to a lack of funds. In addition, Settlement Center PJSC surrendered its banking license without closing its legal entity and became a nonbank financial institution – a central counterparty. As a result, 71 solvent banks were operating on the market at the end of 2021.

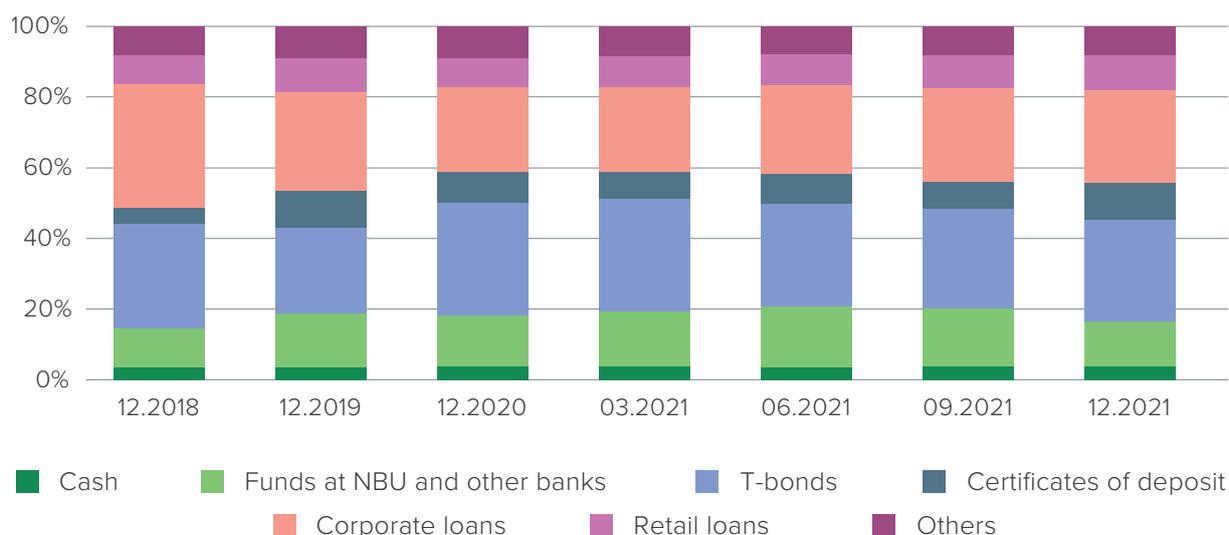
The share of state-owned banks in net assets decreased by 5.8 pp, to 46.7%, while the share of private banks grew. CB PrivatBank JSC remained the leader by retail deposits, accounting for more than 30% of the sector's deposits. As assets were redistributed in favor of smaller banks, the sector's concentration declined gradually. The 20 largest banks account for almost 90% of the sector's total net assets.

Assets

Over the year, the banks' net assets rose by 12.8%, to UAH 2,054 billion², driven mainly by accelerated growth in retail and corporate lending. On the other hand, the growth in the banks' holdings of domestic government debt securities slowed significantly, to 1.6%. In particular, the holdings of state-owned banks decreased markedly. Banks used their excess liquidity to buy NBU certificates of deposit. NBU funds, interbank loans, and banks' cash desk balances also grew in 2021.

2 At banks solvent as of the end of 2021. The data for 2021 may be revised.

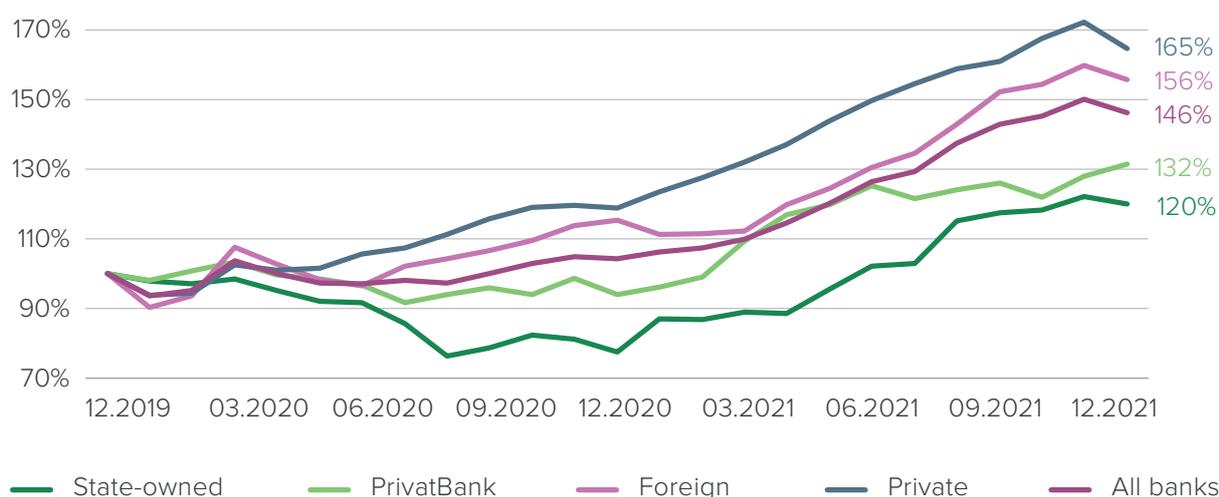
Structure of bank assets



Corporate lending grew rapidly over the year, slowing somewhat only in December as a result of seasonal loan repayments by farming businesses and companies engaged in public contracts. Compared to the crisis year 2020, growth rates increased tenfold. Over the year, net hryvnia corporate loans soared by 40.2%. State-owned banks (excluding PrivatBank) were the most active in corporate lending, which increased by 50%. Net foreign currency loans grew by 9.6% over the year in the U.S. dollar equivalent.

Small companies that remained vulnerable to the coronavirus crisis made active use of state support programs. Such programs envisaged partial compensation of interest rates and state guarantees for loans. This primarily concerns the Affordable Loans 5–7–9% program, which was an additional factor encouraging lending to small- and medium-sized enterprises. In 2021, around a quarter of all new net hryvnia loans were provided under the program, with the loans together totaling UAH 64 billion.

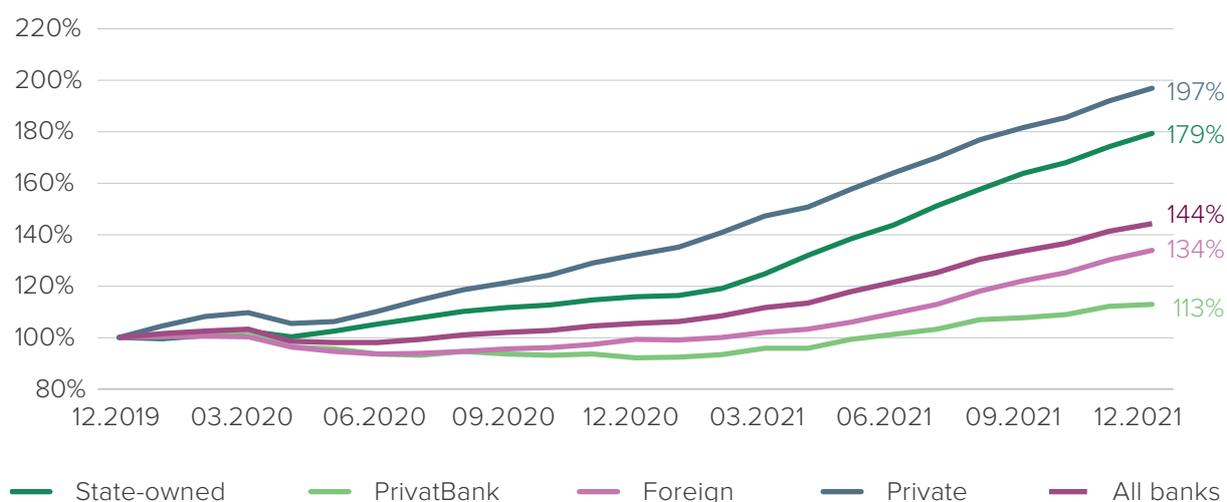
Net hryvnia corporate loans, 2019=100%



Retail lending grew more rapidly than before the coronavirus crisis. The growth in household income contributed to an increase in borrowing power. Coupled with the widening practice of paying by card during the pandemic, this created favorable conditions for growth in retail lending. The retail segment remained the most profitable and thus the most attractive for banks. In 2021, the net hryvnia portfolio of retail

loans increased by 36.9%, up from 5.4% growth in 2020. Mortgage lending rose more rapidly, albeit against a relatively low base: the growth in net hryvnia loans for buying and reconstructing real estate reached a new high of 62.4% yoy at the end of 2021. Low interest rates were the main driver of mortgage lending. The Affordable Mortgage state program also supported the growth in mortgage lending.

Net hryvnia retail loans, 2019=100%



The share of nonperforming loans continued to decrease, by 11.0 pp, to 30.0%. State-owned banks made the largest contribution to this reduction. They rapidly increased their loan portfolios and wrote off old nonperforming loans in line with their business strategies. Nonperforming loans do not pose a threat to the banking system, as they are fully provisioned.

Funding

In 2021, the banks' liabilities grew by 11.5%, reaching UAH 1.798 trillion as of the end of December. The main growth components

included client deposits and the NBU's liquidity assistance to banks. Inflows of client deposits were driven by macroeconomic factors: the economy was recovering, and household income and corporate earnings rose, and partially accumulated in bank accounts. Retail and corporate deposits accounted for 84.9% of liabilities as of the year-end. The amount of refinancing loans more than doubled over the year, while the share of the NBU's funds in liabilities rose by 1.5 pp, to 5.3%. On the other hand, the banks' gross external debt shrank by 7.2% over the year. Interbank liabilities also decreased.

Structure of bank liabilities



In 2021, hryvnia retail deposits grew more slowly than in 2020 – by 15.3% yoy. At the same time, foreign currency deposits decreased by 1.8% yoy in US dollar equivalent due to outflows of term deposits. The largest growth in hryvnia deposits was seen during the year in private banks, while foreign currency deposits

grew the most in foreign-owned and private banks.

The share of retail clients' current hryvnia accounts increased rapidly over the last two years, reaching a record high of 57% as of the end of June

2021 and at the end of 2021 as a result of large payments to households. Hryvnia term deposits continued to grow, increasing by 9.6% over the year. The vast majority of new term deposits had maturities of more than three months.

Hryvnia corporate deposits increased by 26.4% yoy, and foreign currency corporate deposits grew by 3.9% yoy in the U.S. dollar equivalent. Corporate deposits grew the fastest at private banks.

The natural de-dollarization of the banks' balance sheets continued thanks to low interest rates on foreign currency deposits. In 2021, the dollarization of client deposits declined by 5.1 pp, to 32.9%, despite the weaker hryvnia and thanks to faster growth in clients' deposits in hryvnias compared to those in foreign currencies.

Throughout the year, the banks had sufficient liquidity to absorb shocks. The majority of the banks met the Liquidity Coverage Ratio (LCR) exceeding it by a comfortable margin. The Net Stable Funding Ratio (NSFR) of 80% was implemented on 1 April 2021, and it will be raised gradually, by 10 pp, every six months. As of the end of 2021, the NSFR was already more than 100% at all banks.

Interest Rates

The NBU tightened its monetary policy in 2021. Over year, the key policy rate was raised five times, from its all-time low of 6% to 9% per annum. Therefore, the decline in interest rates on new deposits that lasted during for the whole of 2020 stopped, although the cost of funding continued to decrease for a while. The competition for depositors among banks increased in Q3 due to a pickup in consumption and a corresponding decline in inflows of client deposits. Due to the need for term deposits, banks started to raise their interest rates gradually, while the spread between 3-month and 12-month retail deposits grew to 1.7 pp as of the year-end. The weighted average rate on new 12-month retail deposits grew from 8.7% in December 2020 to 9.2% per annum in December 2021 for hryvnia deposits, and declined to 1.1% per annum for U.S. dollar deposits.

Therefore, the rate on new hryvnia corporate loans decreased in Q1 and then started to grow, and for the first time in 18 months exceeded 10% per annum. In contrast,

the average cost of foreign currency corporate loans dropped to around 3% per annum. Interest rates on retail loans remained at around 30% per annum throughout the year due to the large share of high-risk consumer loans. The cost of mortgages declined slightly over the year: to 13.6% per annum on the secondary real estate market, and to 16.1% on the primary market.

Financial Results and Capital

Ukraine's banks made a record profit of UAH 77.5 billion in 2021. This is twice the amount earned as of the end of the crisis year of 2020. The number of loss-making banks fell from eight to five, and their total losses remained insignificant. Return on capital was 15% at 31 banks that together accounted for 82% of the sector's assets. Three of these banks were state-owned banks. CB PrivatBank JSC generated the highest profit – 45% of the sector's total profit.

Net interest income grew rapidly in the reporting year, especially in Q4. Cumulatively, it rose by 39% yoy over the year. The main factors driving this growth included active growth in lending, and deposit rates being lower than last year. Interest expenses therefore decreased, while interest income increased. The banks' fee and commission income grew on a further rise in the volume of cashless transactions, in particular card transactions. The growth rates of net fee and commission income were at their highest in Q2, after which they began slowing. This was driven by both the statistical effect of a higher comparison base and market participants' adaptation to lower interchange commissions charged by payment systems. Overall, net fee and commission income grew by 25% in 2021.

Operating expenses increased more slowly than in the crisis year of 2020. With clients switching to online transactions, banks were able to optimize their branch networks and cut expenses on supporting them. Part of the funds they saved this way were allocated to upgrading IT. Operating income grew faster than operating expenses, which improved the banks' operational efficiency. The Cost-to-Income Ratio (CIR), excluding the revaluation effect³, was 50%, down from 59% in 2020.

3 The revaluation of foreign currency and securities, including derivatives.

The economic recovery in 2021 allowed banks to improve their asset quality review results, and some of them even managed to release a part of their provisions. Expenses on loan loss provisions decreased by almost 60% yoy.

Their share in the banks' net loan portfolios (CoR) was much below the previous year's level, at 1.2%. In addition, banks freed up the funds previously provisioned against legal risks.

Banks' profit or loss* and return on capital



*Current data for 2021.

The sector's high profitability allowed work to continue on harmonizing bank capital requirements with the recommendations of the Basel Committee on Banking Supervision, and with EU directives. Effective 1 April 2021, above-zero risk weights began to be implemented for domestic government debt securities in foreign currencies, starting at 25%. In H2, the NBU also started to raise risk weights for unsecured consumer loans. These steps create an additional liquidity buffer to cover potential losses in the event that any adverse conditions arise. The banks continue to clear noncore assets from their balance sheets. From January 2022, the share of noncore assets to be deducted from core capital was raised to 50%.

Risk weights have thus continued to increase since the start of 2022: from 125% to 150% for unsecured consumer loans, and to 50% for foreign currency domestic government debt securities. Moreover, the minimum operational risk capital requirement was set at 50% of the estimated amount from 1 January 2022.

As the new requirements were implemented, the average value of regulatory capital adequacy declined to 18%, and core capital to 12%. However, the banks remained able to maintain their capital at levels much above the minimum requirement. The banks' regulatory capital rose by 16.3% over the year, while their authorized capital grew

by as little as 0.3%, to UAH 482.1 billion at the end of the year.

Amendments introduced to banking legislation in June 2021, in particular to the Law of Ukraine On Banks and Banking, implementing a three-tier capital structure, made it possible for the regulator to set individual increased requirements for banks' capital and liquidity, and widened the NBU's powers to set capital buffer requirements. Over time, the internal capital adequacy assessment process (ICAAP) and internal liquidity adequacy assessment process (ILAAP) will become the basis for the Supervisory Review and Evaluation Process (SREP). In addition to the minimum requirements, banks will have to determine their capital and liquidity needs so as to cover all of their major inherent risks and to comply with regulatory requirements over a defined time horizon.

Bank Stress Testing in 2021

After a one-year pause caused by the coronavirus crisis, the NBU in 2021 resumed stress testing the largest banks of Ukraine. The stress tests covered the 30 largest banks, which together accounted for 93% of the banking system's assets. As usual, the assessment included two scenarios: a baseline scenario and an adverse scenario. The baseline scenario is in line with the NBU's macroeconomic forecasts. The adverse scenario assumes the occurrence of stress that triggers

the realization of the main financial risks, namely credit risk and market risk (including interest rate risk). A bank's potential losses from changes in the value of government securities were assessed for the first time.

Based on results of the resilience assessment, the NBU set the required capital adequacy level for some banks above the minimum requirement. This target was calculated in a way that ensures that banks have sufficient capital to cover their potential losses even if stress events occur. Ten banks passed the stress testing successfully. These were mostly foreign-owned banks, along with the state-owned PrivatBank. The NBU set increased capital adequacy requirements for nine banks under the baseline macroeconomic scenario. At the same time, under the adverse macroeconomic scenario, increased capital adequacy requirements were set for 20 banks. The estimated equivalent of capital needs

as of 1 January 2021 under the adverse scenario was UAH 41.7 billion, which was half as much as in the 2019 stress tests. State-owned banks accounted for 79% of this amount. The loan quality of the largest debtors was also mainly good. Proper provisioning and conservative lending standards led to a decrease in credit risks.

The stress tests confirmed that the banking system is in good health, despite the past crisis. The majority of banks that had responded to the results of previous stress-tests had no need to increase their capital. On the other hand, the financial institutions that needed additional capital are implementing restructuring programs. The number of detected risks were reduced even during 2021 according to the programs. The banking system was thus ready for the further implementation of capital requirements according to schedule.

Key Indicators of the Banking Sector

Items from the State Register of Banks (as of 31 December 2021)	Number
Banks licensed to provide banking services	71
Registered standalone units of Ukrainian banks in the territory of Ukraine (including subsidiaries and representative offices)	6,681
Operating branches of Ukrainian banks in the territory of Ukraine	6,607
Standalone units of Ukrainian banks closed in 2021 in the territory of Ukraine	887
Standalone units of Ukrainian banks opened in 2021 in the territory of Ukraine	144
Operating standalone units of Ukrainian banks abroad	4 ⁴

Approval of Bank Charter

The NBU approves the charter of a newly established legal entity intending to engage in banking activities (a newly established bank).

Moreover, the central banks approves any amendments to the charter of an operating bank. If a bank's authorized capital is increased, the NBU checks the origin of the funds paid into the bank's authorized capital by its shareholders. These funds must be their own, and not borrowed.

	2018	2019	2020	2021
Document packages received:				
total	137	57	58	67
to increase authorized capital	42	26	25	19
to decrease authorized capital			1	

⁴ Including the representative office of the FUIB (First Ukrainian International Bank) in London, which is temporarily closed.

Approved amendments to charters:				
total	105	45	44	40
to increase authorized capital	32	19	18	17
to decrease authorized capital			1	
Rejected amendments to charters:				
total	3	3	2	1
to increase authorized capital	3	2	2	1
Returned document packages	30	1	2	6

The NBU also reports that, in accordance with Section VII, Chapter 45-1, paragraph 388-1 of the Regulation on Bank Licensing approved by NBU Board resolution No. 149, dated 22 December 2018 (as amended), prior to a decision on approving amendments to a bank's charter that are not related to changes in the bank's authorized capital, the bank has the right to receive the NBU's preliminary opinion on the compliance of the draft charter with Ukrainian law.

In 2021, the Licensing Department received 52 document packages bearing requests for the NBU's preliminary opinion on the compliance of a bank's charter with Ukrainian law.

- Results of considering the submitted document packages included:
- preliminary opinions provided – 10
- requests for preliminary opinions rejected – 27
- returned – 4.

Approval of Top Managers of Banks

The NBU follows the established procedure for approving the banks' top managers (chair, deputy chairs, and members of the supervisory board; chair, deputy chairs, and members of the management board; and the chief accountant of the bank), the chief risk officer, the chief compliance officer, and the head of internal audit (hereafter, top managers). When approving top managers, the NBU checks their compliance with the qualification requirements it has set. In particular, candidates must have an impeccable business reputation, the required fitness and propriety, the relevant knowledge, professional, and the managerial experience needed for a top manager to properly fulfill their duties, taking into account the bank's business plan and strategy. The NBU also assesses the functional load and the scope of responsibility of a specific top manager, and – for independent directors – their compliance with independence requirements.

Approval of Top Managers by the NBU

in 2021	Number
Document packages received for approving top managers:	233
Based on results of consideration of the submitted document packages:	
top managers approved	145
rejected	28
document packages returned (for further work, upon banks' requests, remaining unconsidered, etc.)	44

Supervision over Bank Owners

The Law of Ukraine On Banks and Banking and NBU regulations set requirements

for the business reputation and financial standing or property status of owners of qualifying holdings in banks. These requirements must also be met by persons that acquire or increase a qualifying

holding in a bank. Having checked these persons, the NBU grants or refuses permission to acquire a qualifying holding.

In 2021, the NBU:	Number
received document packages for acquiring a qualifying holding	19
approved acquisitions of a qualifying holding	9
refused requests to acquire a qualifying holding	3
returned document packages on acquiring a qualifying holding	1
extending the period for acting on the intention to acquire a qualifying holding in a bank	1
refusing to extend the period for acting on the intention to acquire a qualifying holding in a bank	0
determined that a person has a decisive influence and recognized the person as the owner of a qualifying holding	0
imposed a fine for the unauthorized acquisition of a qualifying holding	2
canceled approval for the acquisition of a qualifying holding	0
prohibited the owner of a qualifying holding in a bank from selling off the bank's shares	0
requested the owner of a qualifying holding in a bank to sell off the bank's shares	0

Supervision over Transparency of Ownership Structures

The NBU checks banks' ownership structures for transparency. An ownership structure reflects the ties between a bank and its owners. In 2021, the NBU published 126⁵ datasheets on banks' ownership structures. As of today, the owners of all banks have been disclosed,

and each bank has an owner of a qualifying holding.

Supervision over Banking Groups

The NBU supervises banking groups. Pursuant to the Law of Ukraine On Banks and Banking, a banking group must comply with requirements set by the NBU.

In 2021, the NBU:	Number
approved changes in ownership structures	5
recognized	2
derecognized	1

As of the end of 2021, 25 banking groups were operating in Ukraine (24 as of the end of 2020).

In 2021, the NBU performed bank supervision with the use of a risk-based approach, through following the Guidelines of the European Banking Authority on common procedures and methodologies for the Supervisory Review and Evaluation Process (SREP), supervisory stress-

Risk-Based Banking Supervision

5 Including: COMMERCIAL BANK ZEMELNYI KAPITAL JOINT-STOCK COMPANY (NBU Board decision No. 469 On Revoking the Banking License and Liquidating ZEMELNYI KAPITAL JOINT-STOCK COMPANY dated 9 September 2021), FINANCIAL MARKET CONTRACTS SETTLEMENT CENTER PUBLIC JOINT-STOCK COMPANY (NBU Board decision No. 390 On Revoking the Banking License of FINANCIAL MARKET CONTRACTS SETTLEMENT CENTER PUBLIC JOINT-STOCK COMPANY dated 10 August 2021)

testing, and the recommendations of the Basel Committee on Banking Supervision on using a proportional approach for supervision.

Such an approach sets focus on bigger, more complex, and risk-exposed banks, with consideration to their risk profile and main lines of business. The NBU's risk-based supervision approach contributes to ensuring the financial stability of the banking system and the protection of the interests of bank creditors and depositors. It also complies with the best world practices.

Main Results of Offsite Banking Supervision

Within the framework of its risk-based banking supervision, the NBU implemented offsite banking supervision on an individual and consolidated basis, taking into account the requirements established by the NBU on the peculiarities of bank regulation⁶ aimed at recovering from the negative impact of banking system restrictions and adapting to the new conditions caused by the quarantine introduced to prevent the spread of COVID-19 in Ukraine.

1. Evaluating Banks Based on SREP Methodology

In 2021, 71 banks were assessed according to SREP methodology, the results of which determined the further strategy for banking supervision in 2022.

The SREP-based assessment of the banks had four components:

- analysis and assessments of the banks' business models' viability and the sustainability of their strategies
- corporate governance quality assessments, including of the systems of internal control and risk management
- assessments of capital adequacy for coverage of the main types of risks inherent in the bank's activities
- assessments of liquidity adequacy for the coverage of liquidity and financing risks.

When performing the assessment, the NBU ensured it communicated with the heads of banks in order to discuss the assessments' results, identify risks inherent in each bank's activities, and determine measures to avoid or remedy undesired consequences that could threaten the security of depositors' funds or hamper proper banking activities.

The banks have submitted their business models and development strategies for 2022-2024, and these will be assessed in 2022.

2. Assessing Banks' Resilience

In 2021, the NBU performed a resilience assessment of the banks and banking system of Ukraine.

The resilience assessment involved an asset quality review (AQR) by independent auditors of all Ukrainian banks. Also, the NBU conducted stress testing of the 30 largest banks, which together account for 93% of the banking system's assets.

As part of the resilience assessment procedure, verification of credit risk assessments of the banks' assets was included in the sampling, in line with the requirements of the Terms of Reference for Assessing Resilience of Banks and Banking System of Ukraine in 2021.

In 2021, the NBU ensured control over the compliance by the banks of the writing-off of depreciated financial assets under the criteria set by the central bank, taking into account the recommendations of independent auditors on writing-off the respective assets.

The banks that the NBU obliged to implement measures to increase their capital, on the basis of the resilience assessment findings for 2021, developed capital increase/restructuring plans.

3. Ongoing Monitoring of Banks' Financial Standing and Bank Groups' Performance

Based on the findings of offsite supervision, the NBU ensured the following:

6 NBU Board Resolution No.73 On Peculiarities of Assessing the Resilience of Banks and the Banking System of Ukraine in 2021, dated 21 July 2021 (as amended)
Rules of Operation of Banks of Ukraine due to the Imposition of the Quarantine Regime and Introducing Restricting Countermeasures to Prevent the Spread of the COVID-19 Disease, as approved by NBU Board resolution No. 160, dated 21 December 2020 (as amended)

1) monitoring of banks' financial standing and bank groups' performance based on observations of changes to the banks' financial standing by:

- supervising compliance with banking laws, NBU regulations and economic ratios
- monitoring compliance with the requirements and limitations set by the NBU on banks' activities
- analysis of statistical/financial reports of banks/banking groups and information obtained from other available sources
- assessment of the impact of the banks' inherent risks on the financial stability of a bank or the banking system of Ukraine

2) analysis of the strategies for problem asset management and operating plans for working with NPLs and foreclosed property developed by the banks, as well as measures taken to write off impaired financial assets through estimated loss allowances under expected credit losses, so as to clear the banks' balance sheets of accumulated nonperforming assets and create the prerequisites for restoring lending to the economy

3) assessment of the recovery plans developed by the banks, and the provision of respective recommendations

4) prompt supervisory responses to:

negative trends in the activities of individual banks that have higher risks, with respective recommendations being provided, along with follow-up monitoring of their implementation

violations by banks and banking groups of banking laws, and to risky activities threatening the interests of depositors or other bank creditors.

Where violations were found, the NBU imposed the appropriate corrective measures to prevent the affected banks' financial standing from deteriorating, mitigate against current risks, and protect the interests of depositors and other bank creditors. As a result of offsite banking supervision in 2021, 42 corrective measures were imposed on banks, including: written warnings – 23; restrictions on certain types of transactions, including related party transactions – 7; fines being imposed on banks – 6; temporary suspension from office of a bank official until

the remedying of a violation – 1; classifying a bank as a problem one – 2; classifying a bank as insolvent - 1; and revoking a banking license and bank liquidation – 2.

4. Ensuring Control over Banks' Transactions with their Related Parties and Analyzing the Terms of Banks' Transactions to Identify Nonmarket Conditions

In 2021, the NBU maintained effective control over the banks' implementation of action plans to bring their activities into compliance with the applicable laws and NBU regulations. This concerned related-party transactions and monitoring of related parties, and agreements concluded under terms that did not match current market conditions.

Last year was notable for the following:

- three banks successfully implemented their planned measures and brought their ratio of maximum credit exposure to related parties (N9) into line with regulatory requirements, with one bank achieving this ahead of deadline. Thus, the banks completed the implementation of measures to bring the volume of their exposure to related parties into line with the regulatory requirements, in accordance with NBU Board Resolution No. 314, dated 12 May 2015
- Credit and deposit operations of banks were constantly monitored in order to identify agreements concluded by banks on terms that do not match current market conditions, identify signs of affiliation between banks, and to monitor the completeness of banks' reporting of related parties, including on ownership corporate rights and existing family ties.

Among the key tasks for 2022 on monitoring transactions with bank-related persons is to monitor the reporting of banks in order to identify signs of connections between banks, and non-market conditions for cooperation, to monitor the completeness of the disclosure of bank-related persons, and to conduct risk assessment of operations with related parties as part of the Bank Assessment (SREP).

5. Quality Control over Audit Services Ensured

In 2021, the NBU monitored the banks' compliance with the requirements of Ukrainian law, including NBU regulations for audit firms,

with regard to conducting annual audits of the financial statements and consolidated financial statements of banks. The NBU reviewed bank compliance with legislative restrictions on the maximum term for reaching agreements with auditors on annual and consolidated financial reporting for not more than seven consecutive years.

In 2021, the NBU analyzed auditor reports that reviewed the annual financial reporting of all Ukrainian banks, and 25 auditor reports that reviewed the annual consolidated financial statements of the banks that had been placed on banks' official websites.

Information obtained from the analysis was sent to the Audit Supervisory Council of the Audit Social Supervisory Authority regarding the low quality of audit services provided by some audit firms, auditors' failure to perform, or the improper performance of their professional duties, and non-compliance with NBU regulations. As a result, the Audit Social Supervisory Authority imposed respective corrective measures on two audit firms in 2021.

Also, in 2021, the NBU monitored the banks' independent external quality assessments of their internal audit functions, in line with the international standards for the professional practice of internal auditing, and the state of the banks' compliance with recommendations received from external evaluators on increasing the quality of the banks' internal audits.

Supervision over Banks in the Form of Inspections

The NBU Board Resolution *On Suspending Onsite Inspections of Banks*⁷ was in force in 2021. The resolution suspended all types

of scheduled onsite inspections of banks and other entities supervised (oversighted) by the NBU for the period up to the last calendar month (inclusive) of the quarantine imposed by the Cabinet of Ministers of Ukraine to prevent the spread of COVID-19 in Ukraine.

The NBU Board canceled its plans for inspecting banks in 2021.

At the same time, in 2021 the NBU conducted unscheduled inspections of banks on the grounds set forth in Ukrainian law and NBU regulations.

Main Results of Inspections of Banks

Exercising its function of carrying out inspections to supervise banks, the NBU in 2021 conducted nine unscheduled inspections. Their results were sent to the inspected banks. Four unscheduled inspections were started at the end of 2021; after completion in 2022 their results will be sent to the inspected banks.

The main areas of unscheduled inspections in 2021 included: assessment of the level and effectiveness of corporate governance and internal controls in banks, assessment of risk management systems, reviews of asset quality and the acceptability of collateral, and how adequately the banks measure their credit risk.

Based on the results of the unscheduled inspections in 2021, some banks were subject to corrective measures due to violations of Ukrainian laws, in particular:

Corrective measure	Number of banks
written warning	7
restriction, termination or suspension of certain types of transactions performed by a bank	3
fine imposed on bank	1

Additionally, on the basis of the results of unscheduled inspections, the banks received recommendations based on experience and

professional judgment, which were aimed at preventing repeats of violations and eliminating shortcomings in the banks' operations.

7 No. 34, dated 18 March 2020 (as amended).

Harmonizing Prudential Requirements for Banks with EU Legislation and the Recommendations of the Basel Committee on Banking Supervision

In 2021, the NBU continued the implementation of measures within the framework of the Strategy of Ukrainian Financial Sector Development until 2025, the Strategy for Financial Services Market Regulation 2021-2024, the NBU's Action Plan on Enhancing Banking Supervision, and the Action Plan to implement the EU-Ukraine Association Agreement. This was done in conjunction with the IMF, the World Bank, the European Commission, and other international financial organizations.

I. The Verkhovna Rada of Ukraine passed Law of Ukraine No. 1587-IX, dated 30 June 2021, *On Amendments to Certain Laws of Ukraine on Improving Corporate Governance in Banks and Other Operational Issues of the Banking System* (hereinafter Law No. 1587-IX), which was drafted by the NBU.

To implement Law No. 1587-IX, the NBU issued the following regulations:

1. Resolution of the Board of the National Bank of Ukraine № 112, dated 25 October 2021, approving amendments to the Regulations on identifying persons related to the bank, which set the date of entry into force of the NBU decision on determining that a person is related to the bank, notifying the bank about such a decision, and the term for the bank to take this decision into account in its activity.
2. NBU Board Resolution No. 120, dated 18 November 2021, approved amendments to the Regulation on organizing and conducting onsite inspections, which expand/clarify the rights of inspectors and the obligations of a bank's CEO during such inspections regarding free access to all of the information systems of the bank, preparing and seizing (taking outside the bank) any copies of documents.
3. NBU Board Resolution No. 122, dated 22 November 2021, sets the requirement for all banks to develop recovery plans and submit them to the NBU.
4. NBU Board Resolution No. 129, dated 2 December 2021, approved amendments to the Regulation on the NBU's imposing

corrective measures that cover, in particular, the grounds and procedures for imposing new corrective measures – the NBU's requirement for an owner of a qualifying holding in a bank to alienate shares (stakes) in the bank, the imposition of stricter penalties for violations of the requirement to obtain approval to acquire or increase a qualifying holding in a bank, corrective measures for the violation of combined capital buffers, the enlargement of the circle of persons who can be subject to fines imposed as corrective measures, and the expansion of the grounds for imposing corrective measures as a result of the NBU's exercising its right to empower an NBU official to perform supervision over a bank. The NBU also clarified the procedures for imposing certain corrective measures regarding the procedure for temporarily suspending the voting rights of an owner of a qualifying holding in a bank, for suspending a bank official from their position, and for classifying a problem bank as insolvent.

Additionally, with the aim of improving the procedures for imposing corrective measures, the NBU approved amendments to the regulations on imposing corrective measures by the NBU, including:

- NBU Board Resolution No. 61, dated 29 June 2021, unifying the approaches to imposing corrective measures to banks based on the results of supervision in the area of financial monitoring, and corrective measures based on the results of the NBU's supervision in other areas
 - NBU Board Resolution No. 70, dated 5 July 2021, which was brought in line with Law of Ukraine *On Amending Certain Laws of Ukraine on Consumer Protection during the Resolution of Past Due Debts* No. 1349-IX, dated 19 March 2021, imposing corrective measures on banks for violating the laws on consumer rights protection for financial services, including requirements for cooperation with consumers during the resolution of past due debts (requirements on ethical conduct).
5. NBU Board Resolution No. 133, dated 3 December 2021, amended the following:
 - The regulation on the procedure for submitting information on a bank's ownership structure, which sets the timeframe for owners of a qualifying holding and key participants to submit information to the banks on changes in the bank ownership structure, with relevant supporting documents, and which specifies

the timeframe for submitting information on the ownership structure to the NBU;

- The regulation on the organization of internal audit in banks of Ukraine, which specifies the functions of internal audits, the subordination of the head of internal audit unit, the specifics of internal auditing for a banking group (its participants), and which empowers the NBU with the right to request the replacement of the head of the bank's internal audit department due to the non-compliance of their professional suitability and/or business reputation with the qualification requirements set by the NBU.

6. NBU Board Resolution No. 134, dated 3 December 2021, amended the regulation on the procedure for banks to submit audit reports on the basis of the results of the annual audit of their financial statements, regarding the requirements for the submission of the audit report to the NBU by a responsible person of the banking group.

7. NBU Board Resolution No. 135, dated 6 December 2021, approved amendments to the regulation on the specifics of the reorganization of banks under a decision of their owners, in particular, clarifying that banks that participate in reorganizations must comply with the requirements on economic ratios, corporate governance, and the requirements for legal entities when obtaining a banking license.

8. NBU Board Resolution No. 141, dated 15 December 2021, approved amendments to the regulation on the requirements for the rules, procedures and reports on remuneration of the members of the supervisory board and management board of a bank, which sets the requirements for remuneration policy. Moreover, all of the requirements established by the regulation were extended beyond the members of the bank management bodies to include head of internal audit unit, the chief risk officer, the chief compliance officer, the head of financial monitoring unit, and other persons whose professional activities have a considerable impact on the bank's risk profile.

9. NBU Board Decision No. 628, dated 21 December 2021, approved amendments to the methodological recommendations on corporate governance in Ukrainian banks, which are aimed at improving the approaches to corporate governance in Ukrainian banks.

Moreover, in order to implement best practices in sustainable financing, the following was planned:

- to include in the strategy an assessment of the effects of environmental, social, and governance criteria on a bank's long-term sustainability
- to expand the expertise of top managers of banks in environmental, social, and governance issues
- to ensure that the supervisory board of a bank integrates its environmental and social risk management system into its general risk management system.

10. NBU Board Resolution No. 154, dated 24 December 2021, amended the regulation on bank licensing, which established the following:

- requirements for bank strategy, the collective suitability of the supervisory board and management board, as well as the procedure for assessing their compliance with Ukrainian law
- the positions of chief risk officer, chief compliance officer and the procedure for their approval by the NBU.

In addition, it established the procedure for applicants to submit supported applications to the NBU regarding the following:

- extending the period for implementing the acquisition or increasing the size of a qualifying holding in a bank, and the terms for the NBU to take decisions on the respective applications
- cancelling the NBU's decision on approval of the acquisition or increasing the size of a qualifying holding in a bank, and informing the respective person about such decision

It also established the obligation for individuals to submit additional documents to the NBU with the aim of confirming the sources of their own funds, which serve as the grounds for the following:

- the acquisition of titles to property (assets), the total revenue on the sale of which is included in the information on the property's status
- the sale of the titles to property (assets), the total revenue on the sale of which is included in the information on the property's status.

11. In order to implement Law No. 1587-IX, certain amendments were made to the guidelines on the procedure for the regulation of banks' operations in Ukraine, as approved by NBU Board Resolution No. 368, dated 28 August 2001, (as amended). In particular, the following was amended:

- NBU Board Resolution No. 131, dated 3 December 2021, added to the list of implemented capital buffers (conservation, countercyclical, and systemic importance) the systemic risk buffer, which should be created as required by the NBU to mitigate noncyclical systemic risks. The new term "combined capital buffer" was introduced to control the formation of capital buffers in the established volumes
- NBU Board Resolution No. 158, dated 29 December 2021, updated the procedure for granting banks permission to invest in the authorized capital of legal entities and calculate investment caps
- NBU Board Resolution No. 159, dated 29 December 2021, improved the approaches for confirming the banks' sources of funds for creating subordinated debt, financial aid and capital instruments, with the conditions for writing off/converting them, and updated the requirements for the verification of sources of funds for forming these components of regulatory capital.

12. With the aim of improving the requirements for supervision on a consolidated basis, NBU Board Resolution No. 163, dated 31 December 2021, amended the regulation on the procedure for regulating banking groups' activities, as approved by NBU Board Resolution No. 254, dated 20 June 2020, which covers the following:

- granting the right to the responsible entity of the banking group not to take into account the reports of banking group participants (ones other than banks) that have an insignificant impact on the operation of the banks that are participants in the group when preparing the consolidated financial statements of the banking group/sub-consolidated financial statements of a subgroup of the banking group, and calculating the economic ratios of the banking group/subgroup of the banking group
- introducing the calculation of the operational risk of a credit-investment subgroup of a banking group, with the aim of taking it into account when calculating the capital adequacy of the credit-investment subgroup

of a banking group. Such a calculation should be done in test mode, and its results should be gradually taken into consideration when establishing the capital adequacy ratio, using the following coefficients:

- from 29 December 2023 – 0.5
- from 31 December 2024 – 1
- updating the list and the procedure for calculating the ratios for the credit risk of a banking group
- changes to the procedure for establishing the regulatory capital adequacy of an insurance subgroup of a banking group, unifying the approaches to the consolidated supervision of banking groups and nonbank financial groups.

II. With the aim of improving the effectiveness and ensuring the stability of the Ukrainian banking system, pursuant to the provisions of European legislation, the recommendations of the Basel Committee on Banking Supervision, and the documents of the European Banking Authority, and taking into consideration the world's best practices, the NBU issued the following regulations.

1. With the aim of maintaining a sufficient amount of capital in banks/banking groups to mitigate all material risks inherent in banking, and to comply with the regulatory requirements established by the NBU, NBU Board Resolution No. 161, dated 30 December 2021, introduced requirements for the organization of the internal capital adequacy assessment process (hereinafter ICAAP) in banks and banking groups.

Pursuant to Law No. 1587-IX, the new requirements will become obligatory three years after their publication. With the aim of properly preparing for the ICAAP's introduction, a preparation stage and a period for performing test calculations were introduced, in particular:

- before 1 January 2023, banks should develop and approve intrabank documents that regulate the ICAAP
- before 1 July 2023, the responsible entities of banking groups should develop and approve intragroup documents that regulate the ICAAP
- as of 1 January 2024, banks and banking groups should submit their ICAAP reports in test mode to the NBU.

2. NBU Board Resolution No. 162, dated 30 December 2021, established the requirements for banks when calculating the minimum amount of market risk, with the aim of further using it when calculating capital adequacy ratios.

The new requirements should be implemented gradually:

- before 15 July 2022, banks should develop intrabank documents for calculating the minimum amount of market risk
- from August to December 2022, the banks should perform test calculations of the minimum amount of market risk and submit information about the results of these tests to the NBU
- starting from 1 January 2023, the banks should include the minimum amount of market risk in the calculation of their capital adequacy ratios (N2, N3).

3. Taking into consideration the results of the resilience assessments of banks and the banking system conducted by the NBU in 2021, NBU Board Resolution No. 121, dated 18 November 2021, made changes to the procedure for accounting for the minimum amount of operational risk when establishing the capital adequacy ratio, in particular through the calculation of the operational risk using the following coefficients:

- from 31 December 2021 – 0.5
- from 30 December 2022 – 1.

4. With the aim of improving the approaches to the regulation of banks' operations, certain amendments were made to the guidelines on the procedure for the regulation of banks' operations in Ukraine, as approved by NBU Board Resolution No. 368, dated 28 August 2001, (as amended), which in particular included the following changes:

- NBU Board Resolution No. 1, dated 11 January 2021, increased the risk weight for unsecured consumer loans when forming additional capital cushions to cover possible losses on such assets
- NBU Board Resolution No. 117, dated 12 November, 2021 expanded the list of eligible collateral with agreements stipulating that a bank gets compensation for the amount owed to it if a debtor defaults on their obligations. These agreements

are also taken into account when calculating mandatory ratios.

III. With the aim of expanding credit support to the Ukrainian economy, the following regulations were approved:

1. NBU Board Resolution No. 8, dated 26 January 2021, introduced a simplified approach to the calculation of the credit risk on loans of amounts that do not exceed 0.1% of the bank's core capital, based on the status of the debt's servicing by the borrower.

2. NBU Board Resolution No. 58, dated 22 June 2021, introduced approaches to credit risk assessment for various specialized lending types, including project financing, object financing, and financing income-generating real estate, using a multi-factor model.

3. NBU Board Resolution No. 111, dated 22 October 2021, allowed banks that belong to a banking group, subject to compliance with the set requirements, to exclude from their calculations of credit risk ratios 50% of the total volume of transactions with a participant of the group.

IV. In view of the banking system's needs to further implement the anti-crisis measures introduced by the NBU due to the quarantine:

1. NBU Board Resolution No. 40, dated 18 May 2021, extended until 31 December 2021 the effect of the specifics for imposing corrective measures to banks and responsible entities of banking groups, as set forth in NBU Board Resolution No. 73, dated 4 June 2020, On Some Issues of Operation of Ukrainian Banks and Banking Groups.

2. NBU Board Resolution No. 89, dated 19 August 2021, prolonged the terms for banks to submit their business recovery plans in 2021 until 31 December 2021, and specified how the plans should be prepared.

The State of the Nonbank Financial Services Market

The nonbank financial services market developed rapidly in 2021⁸. The NBU improved the regulatory

8 All conclusions about the state of the nonbank financial services market are based on reports as of 1 October 2021, except for licensing data. The section will be updated after reports for the whole of 2021 are received.

environment and was active in its supervisory activities, stripping many companies of the status of nonbank financial institution, mainly due to these companies' noncompliance with the laws of Ukraine. At the same time, institutions that stopped to provide or did not provide any financial services voluntarily surrendered their licenses and were struck off the State Register of Financial Institutions (state register).

At the same time, new institutions entered the market. Over the year, the state register grew by 109 finance companies, 3 pawnshops, 1 credit union, and 15 legal entity lessors.

In the meantime, the NBU started to regulate the debt collection market. Any debt collection agency intending to provide services of settling debts on

consumer loans must register with the NBU's Register of Debt Collection Agencies. As of 31 December 2021, the register contained 62 debt collection agencies.

Despite the decrease in the total number of institutions, assets grew in almost all types of nonbank financial institutions. The largest asset growth was seen in finance companies, although this growth was slower than in banks. Therefore, the financial sector remained bank-centric: the share of the nonbank segment in assets of NBU-regulated financial institutions was as little as 12%.

In 2021, the NBU started working actively on the disclosure of ownership structures of financial service providers. Ownership structures continue to be checked in terms of their transparency and compliance with requirements.

Transparency of Financial Service Providers' Ownership Structures

In 2021, the NBU adopted requirements for the ownership structure of financial service providers, and set the criteria for ownership structure transparency.

Thanks to the adoption of these requirements, descriptions of the ownership structures of Ukrainian financial service providers have been made available to the public on the companies' websites and the website of the NBU.

This makes the financial sector more transparent and trustworthy. All consumers of financial services must understand with whom they are dealing, to whom they are giving their money, and from whom they take a loan.

All nonbank financial institutions (except credit unions) and entities that do not belong to financial institutions but have the right to provide certain financial services, were required to submit information about their ownership structures to the NBU and publish this information on their websites by 17 June 2021.

Companies with opaque ownership structures had the opportunity to remedy this, and bring their ownership structures into compliance with the new requirements by 17 October 2021.

The NBU analyzed how financial service providers were meeting the requirements for submitting ownership structure information, and is now checking their ownership structures for transparency.

The NBU has detected the following signs of nontransparent ownership structures of financial service providers:

- cyclical ownership structures – a situation when a company owns its own shares (shares in the authorized capital), while the actual owner holds a minority stock (share of the authorized capital) but still has a decisive influence on the management and operations of the company
- acquiring/increasing a qualifying holding in a financial institution without the regulator's approval
- no qualifying holders, "football teams" – a situation when, in order to evade the need to get the regulator's approval for acquiring a qualifying holding, the stock (shares in the authorized capital) are divided between 11 shareholders (members) so that none of them has a qualifying holding in the company
- nominal owners – a situation in which one or several shareholders (members) act in the interests and on behalf of other persons (actual owners), who are not disclosed
- trusts and other similar relations – the ownership is divided into nominal and beneficiary ownership, while information about the beneficiary owners is not disclosed.

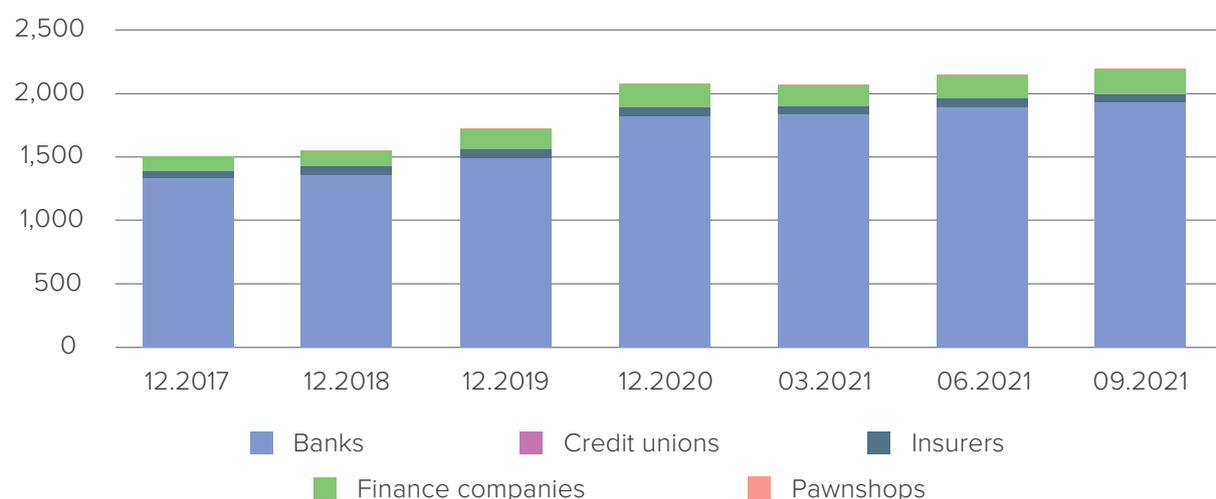
The tightening of information disclosure requirements was another new measure. The new procedure requires nonbank financial service providers to disclose more information, in particular their registration details, the conditions and procedures of their business, and the list of their own websites. They are also required to publish annual and consolidated financial statements, certified by an independent auditor. In its turn, the NBU has started publish nonbank financial institutions' key performance indicators by company on a quarterly basis.

Despite the long transition period, some nonbank financial institutions will still fail to comply with requirements on the submission deadlines and completeness of reports submitted to the NBU. To this end, the NBU has been working on new unified rules for nonbank

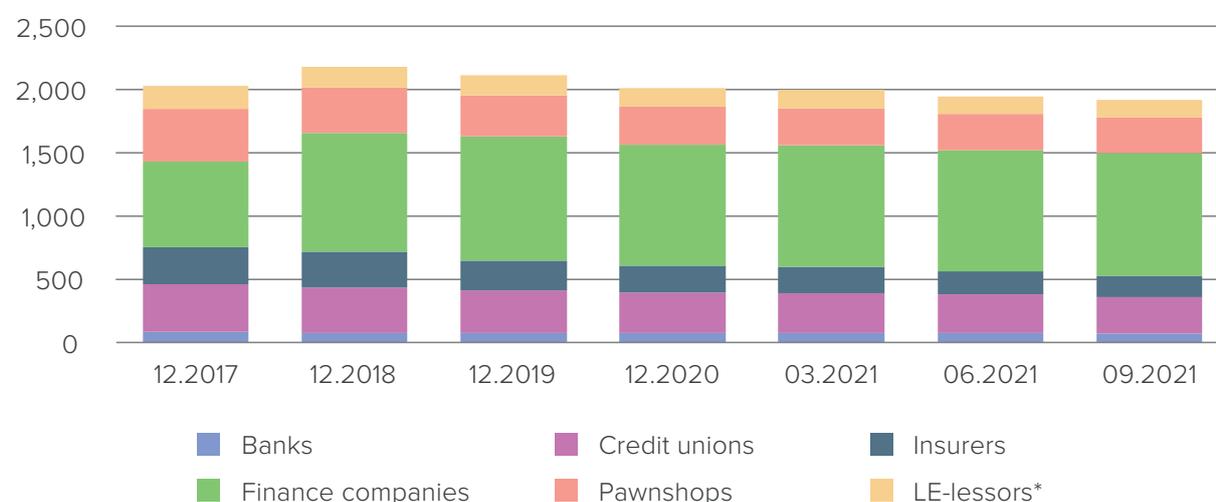
financial service market players when compiling and submitting reports. The new rules clarify and standardize all current requirements. The said rules started to apply from 1 January 2022.

An important event of 2021 was the approval of three laws by the Verkhovna Rada of Ukraine: *On Payment Services*, *On Financial Services and Finance Companies*, and *On Insurance*. During the year, parliament also worked on the draft law *On Credit Unions*, which is expected to be voted on even in 2022. The above laws will contribute to the further development of the nonbank financial services market, enhancing its transparency and resilience, and ensuring companies conduct proper risk management and protect consumer rights.

Assets of financial institutions subject to the NBU's regulation, UAH billions

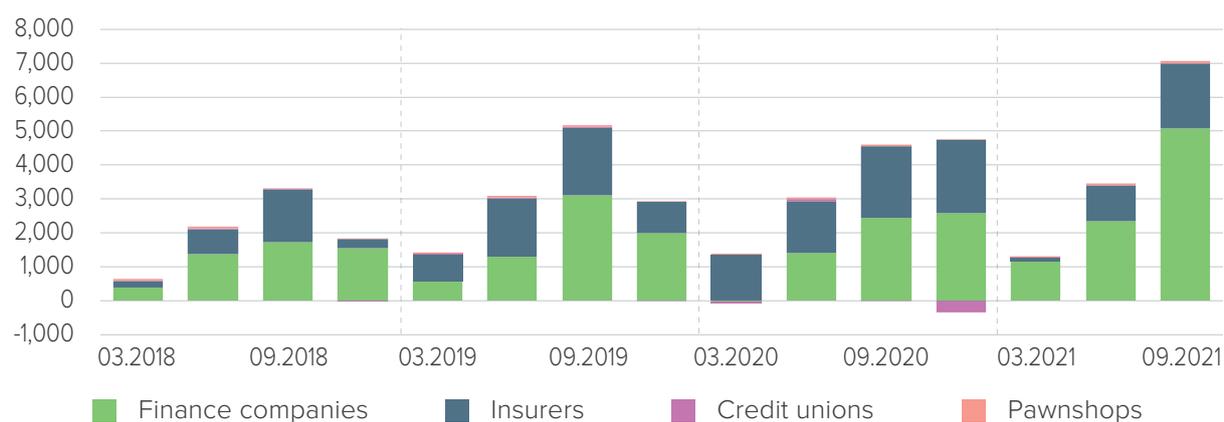


Quantity of financial service providers



* Legal-entity lessors are not financial institutions, but the NBU is the regulator of financial leasing services.

Profit or loss (on a cumulative basis), UAH billions



Insurers

Penetration of insurance in Ukraine is much lower than in other European countries. In particular, despite the growth seen in the previous five years, premiums on life insurance agreements account for around 11% of total premiums, which is only 0.1% of GDP.

Gross premiums on nonlife insurance rose somewhat after having dropped in 2020 due to the coronavirus crisis. The loss ratio of voluntary insurance has been growing for the last few years. As of 1 October 2021, it was 43% – approaching the loss ratio of compulsory insurance, which was 46%. Domestic reinsurance decreased by 21% in 2021.

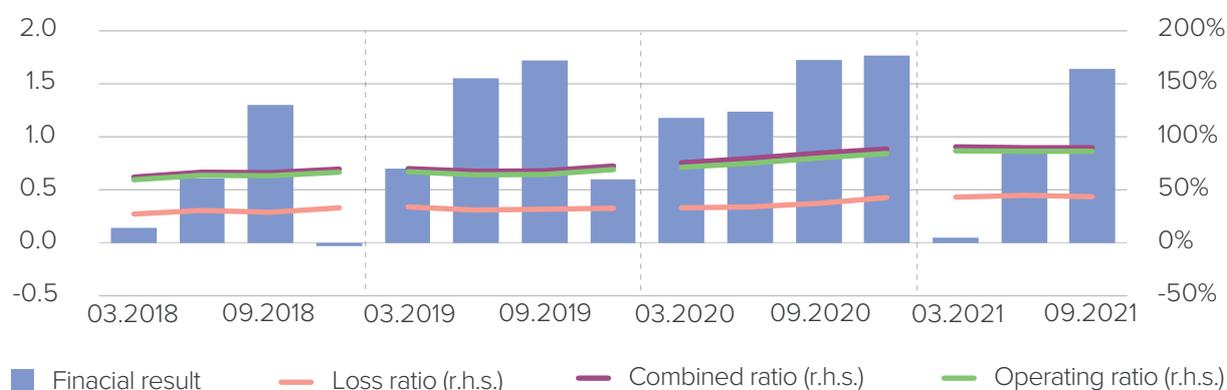
The operational efficiency of nonlife insurers remained low. The insurers' combined ratio⁹

was close to 90% throughout the year. This was due to large expenses on settling insured events.

Insurers remained profit-making in 2021, with their profits hitting a six-year high. Return on assets and return on capital grew in 2021, but did not reach the previous year's level.

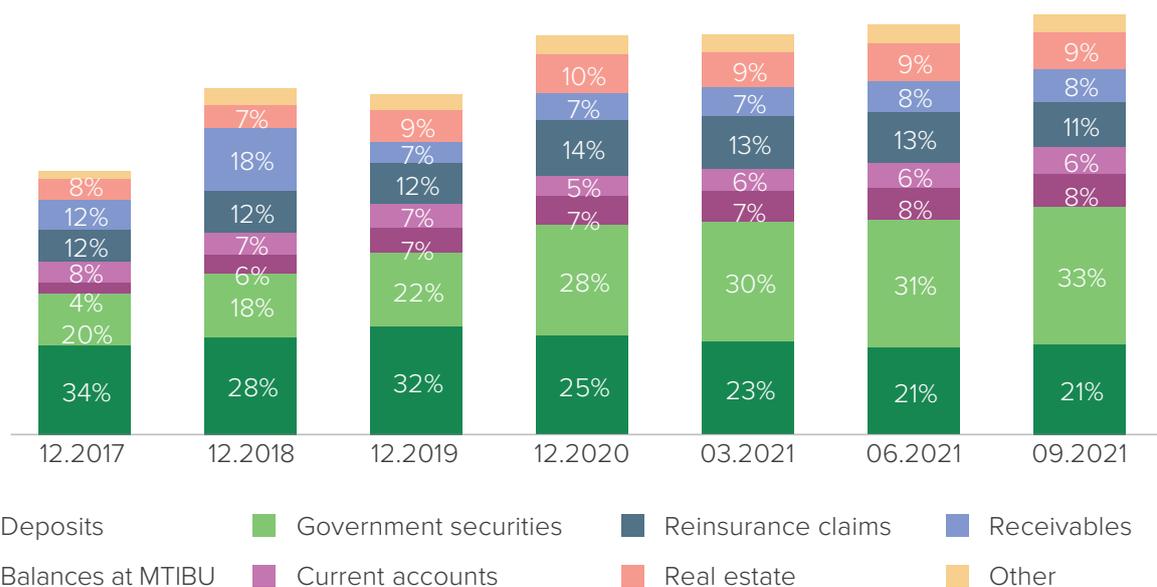
The number of companies that were in breach of solvency and capital adequacy requirements declined gradually in 2021, falling to 16 companies on 1 October 2021. The share of current investments and claims against reinsurers in insurers' assets decreased, whereas the share of domestic government debt securities and deposits increased. As of today, there is still no legal framework for evaluating real estate at fair value, especially land plots.

Profit or loss on a cumulative basis and operational efficiency of nonlife insurers, UAH billions



⁹ Loss ratio plus the ratio of operating expenses to premiums, adjusted for unearned premium reserves.

Structure of nonlife insurers' assets that are eligible for provisioning, UAH billions



Insurance market structure in 2021

Indicator	Quantity	
	155	
Quantity of registered insurers as of 31 December 2021	Non-life	Life
	142	13
Registration		
Number of insurers added to the state register	0	
Number of insurers excluded from the state register	55	
Submission of ownership structure information		
Number of insurers that submitted ownership structure information (total), of which:	147	
Insurers with transparent ownership structures according to the NBU's preliminary assessment	53	
Insurers with signs of nontransparent ownership structures according to the NBU's preliminary assessment	37	
Insurers that need additional checking of ownership structure transparency	57	
Number of insurers that submitted ownership structure information with a delay	5	
Number of insurers that failed to submit ownership structure information	8 ¹⁰	

Credit Unions

The credit union sector has been developing slowly. Assets of credit unions grew somewhat, despite the decrease in the number of institutions.

Assets increased in around a half of credit unions, the increase being the fastest in those of the institutions that were lending actively.

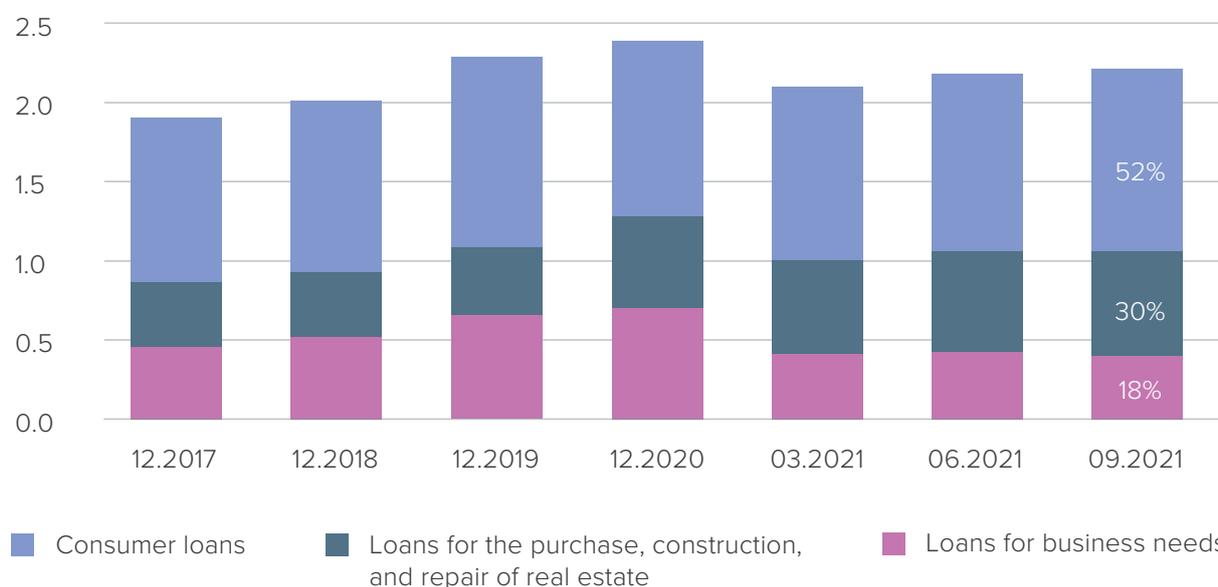
¹⁰ including eight insurers located in the temporarily occupied territory of Ukraine or the territory of Joint Forces operation..

The loan portfolio growth was driven by consumer loans and loans for house purchase, construction, decoration, and reconstruction, whereas lending to corporate clients declined. Loan portfolio quality increased markedly in 2021. As of the start of 2021, more than a quarter of loans were past due by more than 90 days. In contrast, the current average share of loans past due by more than 90 days is stated to be 14%, which corresponds to the pre-pandemic level of 2020. Throughout the year, the NBU paid special attention to the correct recognition of loan servicing status.

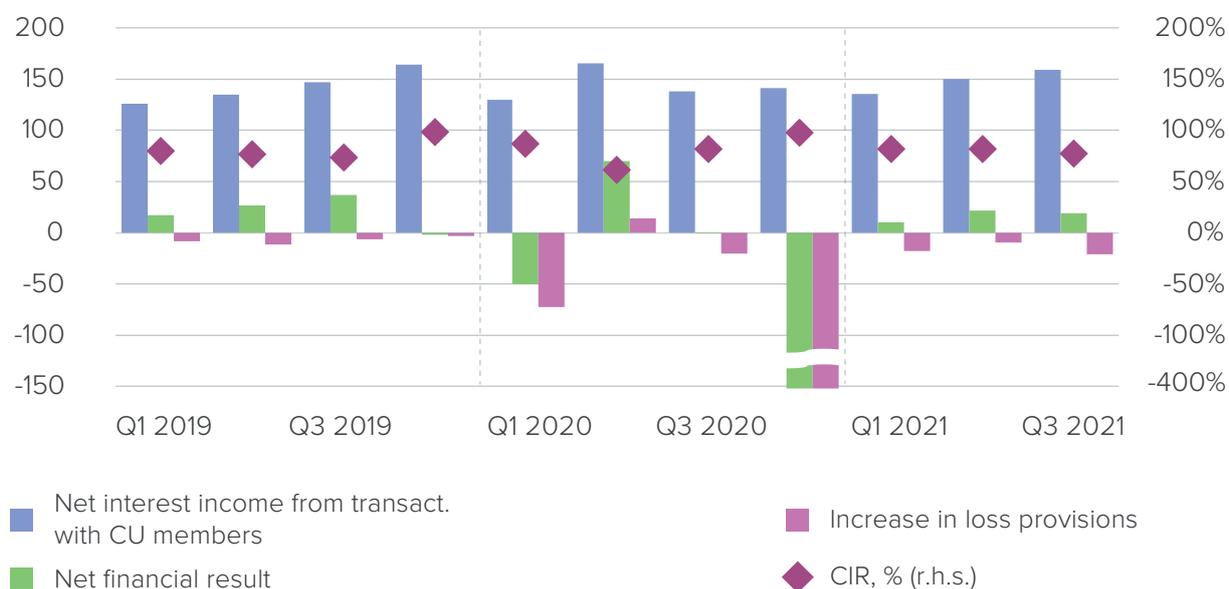
with credit union members, was on the rise. A major factor was the widening of the spread between yields on loans and the cost of deposits. Rates on all types of loans remained high, and deposit rates declined. The larger interest rate spread led to a slight increase in the operational efficiency and profits of the majority of credit unions. This improved solvency and almost halved the number of credit unions that breached regulatory capital requirements – this fell to five institutions. At the same time, the NBU assessed the accuracy of loan portfolio quality data in order to determine the actual condition of the credit union market, and to uncover hidden risks.

The operating income of credit unions, in particular net interest income from operations

Structure of principal of loans to credit union members, UAH billions



Operating efficiency



Credit union sector structure in 2021

Indicator	Quantity
Number of registered credit unions as of 31 December 2021	278
Registration	
Number of credit unions added to the state register	1
Number of credit unions excluded from the register	45

Finance Companies and Lessors

Finance companies developed rapidly in 2021. Although some companies exited the market at the start of the year, assets reached the level of their pre-crisis peak in 2019. This was driven by rapid growth in all of the types of financial services provided.

The increase in the loan portfolio mostly came from legal entity clients. At the same time, finance companies continued to lend actively to households: retail loans grew throughout the year. As usual, households remained the main recipients of new loans. More than 60% of new retail loans were issued for up to 31 days, while almost 90% of legal entity clients received their loans for three months to one year.

Volumes of factoring transactions reached a record high. Finance companies' guarantee transactions grew substantially. Total volumes of financial leasing also increased, although at a slower pace compared to other types of financial services. As before, legal entity lessors were the main providers of such services. The state program Affordable Financial Leasing 5–7–9% was launched at the end of 2021. The program envisages providing state financial support to small and medium-sized enterprises under financial leasing agreements.

In 2021, finance companies generated record-high profits compared to the previous three years. Profitability ratios were also at all-time highs.

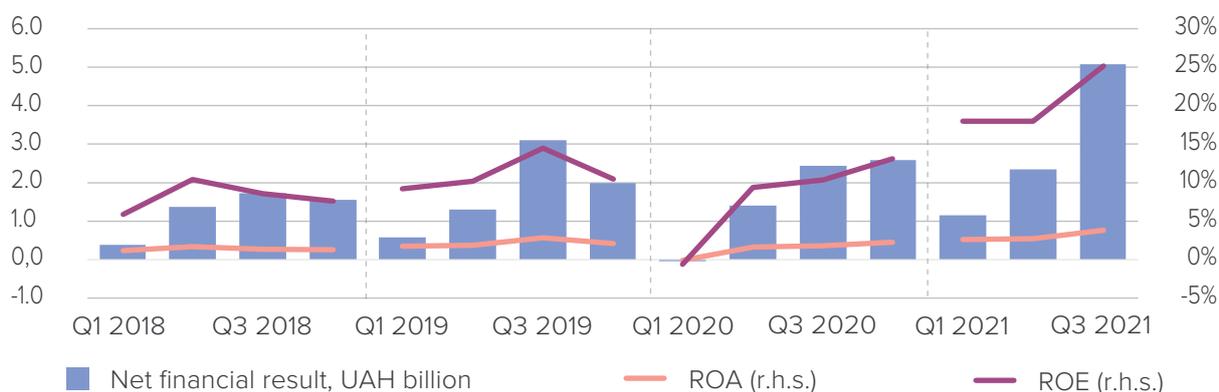
Volumes of financial services provided by finance companies and legal entity lessors by service type (quarterly data), UAH billions



* Data on both guaranties and sureties before 1 July 2020, and only data on guaranties since 1 July 2020.

** Legal entity lessors and financial companies.

Profit or loss (on a cumulative basis) and profitability ratios of finance companies, UAH billions

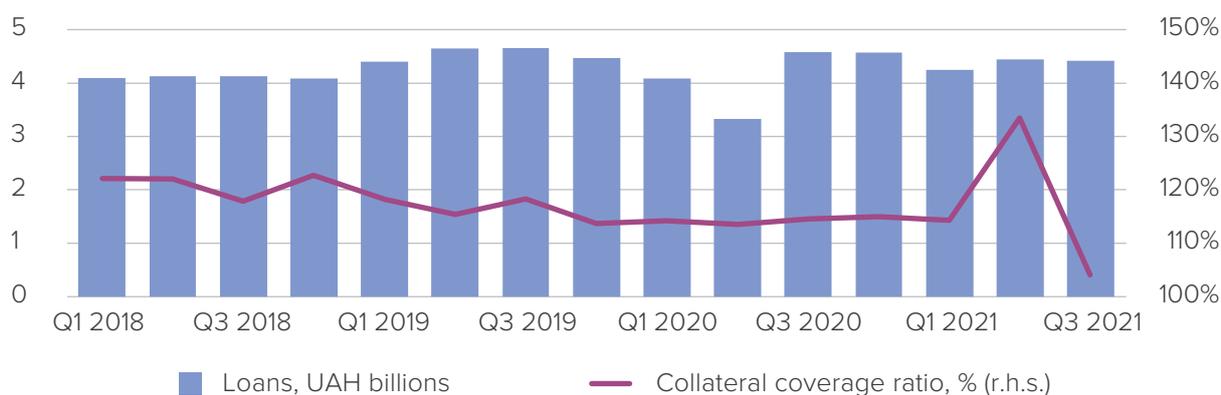


Pawnshops

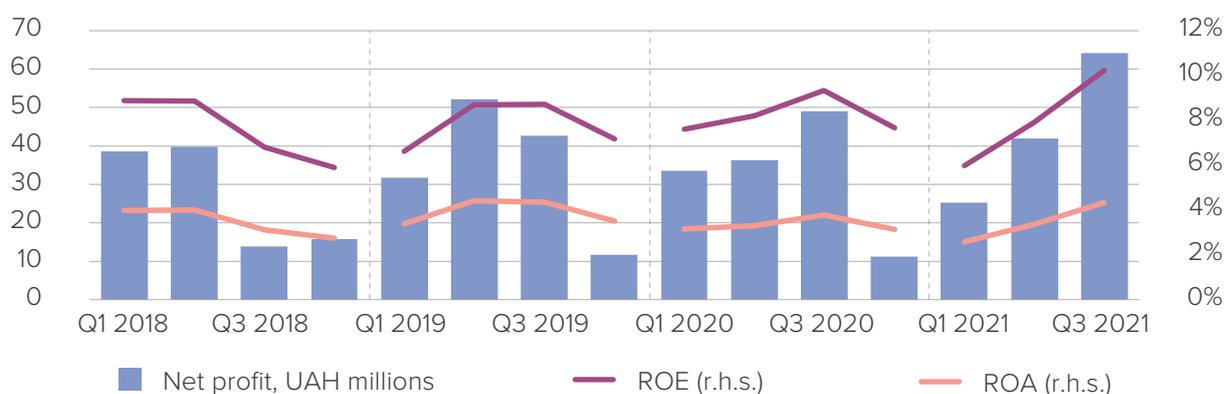
The activity of pawnshops was weak in 2021. Volumes of new loans decreased over the year.

Clients actively repaid their loans, which resulted in a 104% decrease in the collateral coverage ratio. Thanks to previously issued loans, incomes remained higher than expenses. This made the profitability of pawnshops high.

Loans issued over the quarter and collateral coverage ratio



Financial performance indicators



Indicator	Quantity		
	Finance companies	Pawnshops	Legal-entity lessors
Number of registered companies as of 31 December 2021	935	261	137
Registration			
Number of companies excluded from the state register	147 ¹¹	44	44
Number of companies added to the relevant register	109	3	15
Number of companies excluded from the relevant register	147	44	24
Submission of ownership structure information			
Number of companies that submitted ownership structure information (total), of which:	1,054		117
Companies with transparent ownership structures according to the NBU's preliminary assessment	688		114
Companies with signs of nontransparent ownership structures according to the NBU's preliminary assessment	277		-
Companies that need additional checking of ownership structure transparency	89		3
Number of companies that submitted ownership structure information with a delay	88		25
Number of companies that failed to submit ownership structure information	94 ¹²		17 ¹³

¹¹ Excluding construction financing funds removed from the register (47).

¹² Including 61 companies located in the temporarily occupied territory of Ukraine or the territory of Joint Forces operation.

¹³ Including six legal entities located in the temporarily occupied territory of Ukraine or the territory of Joint Forces operation.

New Licensing Conditions for Participants of Nonbank Financial Services Market

By bringing them closer to European standards, the NBU improved the operation rules and the procedures and conditions for accessing the market for nonbank financial institutions, and for entities that are not financial institutions but have the right to provide certain financial services.

Licensing and registration procedures were significantly revised. According to the new rules, institutions can be included in the registers both under a separate procedure and simultaneously with the issue of licenses. Moreover, the list of documents submitted to obtain a license was optimized, and requirements on the business reputation and financial standing of financial service providers were updated.

The business reputation of financial service providers will be assessed when they submit the package of documents for receiving a license, receiving approval for acquiring or increasing a qualifying holding, receiving the approval of candidates for top management positions at a financial service provider, when a subsidiary of a nonresident insurer is registered and licensed in Ukraine, and during the period of validity of a license of a financial service provider.

Individuals or legal entities that exhibit certain attributes of a bad business reputation have

the right to request that the NBU not apply the said attributes to them.

A list of qualification requirements has been set for top managers, chief accountants, and key employees of financial service providers. Institutions must check the compliance of the above persons with these requirements.

The changes envisage the obligation of insurers and joint credit unions to agree on the appointment of top managers and chief accountants with the NBU. A procedure has been established for receiving such approvals from the NBU. A Qualifying Commission has been created. The commission is authorized to interview top managers and chief accountants of joint credit unions and insurers.

Moreover, approaches to assessing the financial/property conditions of owners of financial service providers are also changing. In each specific case, licensing conditions set out the criteria for assessing the financial standing of a legal entity or the property status of an individual (assessment criteria for registration and licensing, acquiring a qualifying holding, etc.).

The NBU will assess the financial or property status of a person based on audit data, in particular the conclusion that the applicant has their own funds, confirmation of the origin of the funds, and disclosure of the payment routing.

Supervision of Nonbank Financial Services Market

In 2021, the NBU continued to implement the risk-based supervision of nonbank financial market participants. Fully 100% of the country's nonbank financial institutions were under permanent off-site supervision. As of the end of 2021, the NBU was supervising 155 credit unions, 278 credit unions, 922 finance companies, 261 pawnshops, and 137 lessors that were not classed as financial institutions.

The supervision resulted in nonbank financial institutions' activities being less risky in 2021, which was reflected in the regular annual assessment of the social significance and risk profiles of credit unions, the promising dynamics of a declining number of credit unions violating requirements, and a significant decrease in the overall deficit of capital needed to meet solvency requirements.

In order attain such results, the NBU constantly analyzed the financial standings of nonbank financial market participants on both reporting and interim dates if it detected high risks in the activities of supervised entities.

The NBU issued 721 violation acts in the course of carrying out off-site supervision.

The majority of acts (392, or 54%) were related to the nonsubmission or the untimely submission of reports and audit reports, or the provision of inaccurate information. More than a third of the acts (232, or 32%) were issued because of a failure to meet mandatory requirements. The majority of the violators were finance companies, whereas the least number of violations were by credit unions. On the insurance market, insurers' compliance with requirements improved markedly thanks to prudent actions taken throughout the year. By the end of 2021, 97% of licensed insurers met solvency requirements and financial ratios¹⁴. At the same time, only 15 insurers violated at least one ratio, which is 3.7 times less compared to the same period last year. As for finance companies, the number of untrustworthy companies licensed to issue guarantees decreased (by 2.6 times over the year, to 117) thanks to supervisory activities. The majority of such companies voluntarily surrendered their licenses for issuing guarantees due to their failure to meet required financial ratios and requirements limiting the risk of transactions involving financial assets.

Overall, companies eliminated the violations noted in the majority of acts (20%) before corrective measures were applied.

In 2021, the NBU issued acts on violations for the following nonbank financial market participants.

Quantity of acts	insurers	credit unions	finance companies	pawnshops	lessors
Ratio violations	81	48	100	3	0
Nonsubmission of information/untimely submission of information/submission of inaccurate information	111	61	160	51	9
Failure to comply with NBU decisions	26	22	28	18	3

Based on the results of considering acts on violations issued during off-site supervision, 447 corrective measures

were applied in 2021, ranging from fines to the suspension and revocation of licenses.

In 2021, the NBU applied the following number of corrective measures	Quantity
Insurance companies	130
Credit unions	94
Finance companies	156
Pawnshops	60
Lessors	7

14 As of 30 September 2021.

In 2021, the temporary suspension of a license until a company eliminated violations was the most widespread corrective measure (143, or 32%). As a result, three credit unions and 23 finance companies and pawnshops eliminated all of their violations and recovered their licenses. None of the insurers and lessors recovered their suspended licenses.

As last year, companies that were dormant and surrendered their licenses on a voluntary basis, and which were then excluded from the State Register of Financial Institutions, continued to exit the nonbank financial services market. At the same time, the number of nonbank financial institutions excluded from the register thanks to the NBU's supervisory activities remained high.

Over the year, the number of insurers declined by 55 companies, of which six companies held life insurance licenses and four companies engaged in providing MTPL insurance. At the same time, only 11 insurers were taken off the State Register of Financial institutions based on their applications, while 44 companies

were excluded at the NBU's initiative after it revoked all of their licenses.

The companies that lost their licenses included 10 insurers registered in the temporarily occupied territories of Donetsk and Luhansk oblasts and Crimea¹⁵.

Almost all insurers that had their licenses cancelled at their request confirmed that they had no insurance obligations and valid insurance/reinsurance agreements as of the date when they applied to the NBU for their licenses to be cancelled.

The majority of credit unions that exited the market during the year were dormant and small, apart from Hromada and Express Credit Union. Hromada credit union¹⁶ left the market due to its inability to meet the obligations to repay deposits to its members as a result of a sharp rise in past due debts on loans, thin capitalization, and imprudent credit and deposit policies. Overall, 45 credit unions were excluded from the State Register of Financial Institutions in 2021.

Some of the corrective measures the NBU imposed in 2021 on

	insurers	credit unions	finance companies	pawnshops	lessors
Elimination of violations	29	36	35	6	0
License suspension	27	20	65	27	4
License cancellation	6	13	43	16	3
Fines	68	22	1	0	0

Fines were imposed mostly on insurers and credit unions.

Results of off-site supervision of financial standing, asset quality, and capital adequacy of supervised entities were the grounds for 48 inspections.

Initiation of Unscheduled Inspections and Cooperation with Law-Enforcement Bodies

The number of unscheduled inspections initiated in 2021	Quantity
Insurers	17
Credit unions	9
Finance companies	25

¹⁵ Due to the adoption of amendments to the Law of Ukraine On Insurance effective 19 December 2021.

¹⁶ After Hromada credit union exited the market, the market's total assets dropped by almost 12%.

Based on results of supervisory activities, in 2021, the NBU sent to law-enforcement bodies five notifications regarding four insurers and two notifications regarding credit unions.

The insurers had been violating financial services laws for a long time. Specifically, these were violations of solvency requirements and mandatory financial ratios, certain transactions, and circumstances of, and actions by, the companies' top managers that may have indicated violation of the criminal law of Ukraine.

In particular, the NBU contacted law-enforcement bodies due to actions by the management of insurance companies UBI-COOP and USI, which had led to the insolvency of the companies and systemic nonperformance of obligations on their insurance agreements.

Repeated violations were detected in the activities of credit unions in the course of unscheduled inspections initiated by the NBU. The violations required law-enforcement bodies to provide relevant responses within their competence, and carry out the respective criminal and legal assessment.

Assessment of Risks and Social Significance

In 2021, the NBU held its regular annual assessment of the social significance and risks of nonbank financial services market participants¹⁷, which was the basis for determining the frequency of scheduled inspections¹⁸.

Assessments were made of 369 nonbank financial institutions, including 148 insurers, 178 credit unions, and 43 finance companies and pawnshops.

One of the main results of the assessment was that there was a significant decrease in the number of companies that were assessed as carrying the highest risks. The number of insurance companies with a risk score of "3" almost halved (25, down from 45). No insurers or finance companies were assessed as having the highest risk score of "4"¹⁹. This reduction in the number of companies carrying the highest risks was mainly due to the regulator removing from the market companies that repeatedly breached mandatory financial ratios and requirements of Ukrainian law.

Nonbank financial institutions, by level of social significance

Supervised entities	Level 1	Level 2	Level 3	Level 4
Insurers	18	27	60	43
Credit unions	9	19	65	85
Finance companies and pawnshops	0	0	9	34

Nonbank financial institutions by risk

Supervised entities	Level 1	Level 2	Level 3	Level 4
Insurers	3	120	25	0
Credit unions	49	123	15	3
Finance companies and pawnshops	21	12	10	0

¹⁷ The assessment period was 1 October 2020 to 30 September 2021.

¹⁸ Pursuant to requirements of the Regulation on Setting Criteria for Assessing Risks in the Activities of Nonbank Financial Services Market Participants and Their Social Importance, Which Are the Basis for Determining the Frequency of Scheduled Inspections, and the Procedure for Applying Them, approved by NBU Board Resolution No. 157, dated 11 December 2020.

¹⁹ As of the assessment date (30 September 2021).

Apart from off-site supervisory activities, the NBU held a number of thematic meetings with participants of the nonbank financial services market in 2021. Such meetings were meant to provide constructive, effective recommendations for the future, aimed at preventing repeated violations and eliminating drawbacks in the operations of nonbank financial institutions.

This active awareness-building for participants of the nonbank financial services market, combined with other measures taken by the central bank, resulted in a significant improvement in discipline in the timely and correct submission of reports by nonbank financial institutions. This especially concerns insurers and credit unions. As of the end of 2021, all insurers that were licensed as of 1 January 2022 had reported to the NBU. At year-end 2021, 100% of credit unions had submitted their reports (apart from those registered in temporarily occupied territories)

Introduction of Supervision over Agricultural Insurance

Along with the implementation of governmental programs to improve state support for agricultural producers, the NBU took a step toward launching an agricultural insurance system. As regulator, the NBU approved requirements for insurers to be authorized to provide insurance for agricultural products with support from the state.

Law of Ukraine *On Specifics of Agricultural Products Insurance with Support from the State*, which envisaged new approaches to the agricultural insurance system with state support, was the result of the cooperation between the NBU, the Ministry of Agrarian Policy and Food of Ukraine, and participants of agricultural and insurance markets. Such approaches are a part of the system to support agricultural producers. It consists of lending, insurance, compensation for losses caused by damage to agricultural crops from manmade and natural disasters, and encouraging the development of animal farming and processing agricultural products.

The implementation of the Law of Ukraine On Specifics of Agricultural Products Insurance with Support from the State envisages that the NBU and the Ministry of Agrarian Policy and Food of Ukraine take joint actions to develop and approve acts aimed at launching the agricultural insurance system.

The requirements for insurers to be authorized to provide insurance of agricultural products with support from the state have already been approved.

In 2021, five insurers expressed their intention to work in this segment. After these insurers are accredited, the Ministry of Agrarian Policy and Food of Ukraine will closely supervise the solvency and financial standing of these companies, as required by Ukrainian legislation.

Introducing Supervision over Insurers Involved in the Process of Common Transit of Goods

On 12 September 2019, the Verkhovna Rada of Ukraine passed Law of Ukraine No. 78-IX On a Common Transit Regime and the Implementation of the National Electronic Transit System (hereafter, the Transit Law). The law aims to introduce the Convention on Common Transit Procedures into the national law, in accordance with Ukraine's obligations under the EU-Ukraine Association Agreement. Pursuant to the law, nonbank financial institutions, including insurers, can become financial guarantors engaged in international transit transportation.

In 2021, five insurance companies received the relevant status and were included in the Register of Financial Guarantors (NCTC) of the State Customs Service.

The NBU ensured the implementation of the provisions of the Transit Law by clarifying the specifics of how insurers should operate in order to comply with the financial services laws, and by monitoring the solvency and financial standing of such insurers in line with the stipulations set out in the Transit Law.

Research Related to Legislative Changes

In 2021, the NBU modeled the impact of the regulatory legislative changes prepared by the central bank on the financial standings of nonbank financial institutions. This was required in order to implement a risk-based approach and the proportionality principle in the regulation of nonbank financial market participants.

Based on the research of the market of guarantees provided by finance companies, the NBU detected signs of systemically risky activities, and proposed amendments

to laws of Ukraine with regard to mandatory financial ratios for guarantors, and to the method of their calculation.

Supervision over Nonbank Financial Institutions in Form of Inspections

The NBU Board Resolution On Suspending Onsite Inspections of Banks²⁰ was in force in 2021. The resolution suspended all types of scheduled onsite inspections of banks and other entities supervised (oversighted) by the NBU for the period up to the last calendar month (inclusive) of the quarantine imposed by the Cabinet of Ministers of Ukraine to prevent the spread of COVID-19 in Ukraine.

The NBU Board canceled its annual plan for inspecting nonbank financial institutions in 2021.

At the same time, in 2021 the NBU conducted unscheduled inspections of nonbank financial institutions on the grounds set forth in Ukrainian law and NBU regulations.

Main Results of Inspections of Nonbank Financial Institutions

Exercising its function of carrying out inspections to supervise the nonbank financial services market, the NBU in 2021 conducted 52 unscheduled inspections of nonbank financial services market participants, in particular:

Type of nonbank financial services market participant	Number of inspections
insurers	17
credit unions	10
finance companies	25

One unscheduled inspection was started in 2021, and its results will be sent to the inspected entity in 2022.

Based on the results of the unscheduled inspections, some nonbank financial institutions were subject to corrective measures due to violations of regulatory requirements, in particular:

Corrective measure	Number of nonbank financial institutions
revocation of license for providing financial services	34 (11 insurers, 2 credit unions, 21 finance companies)
temporary suspension of license for providing financial services	1 (credit union)
obligation to take measures to eliminate the violation and its cause	1 (finance company)

The main reasons for the imposition of the corrective measure of revoking a license to provide financial services were as follows:

- A nonbank financial institution refuses to be inspected, including refusing access to the NBU's authorized inspectors, or refuses access to the premises and sites used to provide financial services, or the absence on the first day of the inspection of a person authorized to represent the interests

of the nonbank financial institution (an entity that is not a financial institution but that has the right to provide certain financial services) while the inspection is being carried out

- The institution does not submit documents regarding the object being inspected.

Based on results of unscheduled inspections, nonbank financial institutions received

recommendations aimed at preventing repeated violations and eliminating shortcomings in their operations.

Regulation of Nonbank Financial Services Market

In 2021, the NBU continued to exercise its powers in regulating the nonbank financial services market. The need to introduce a new regulation aimed at creating favorable conditions for the effective operation and development of the nonbank financial services market, enhancing stability, increasing the transparency of the market, and protecting clients' rights and interests, is stipulated in the Strategy of Ukrainian Financial Sector Development until 2025 and the Action Plan on the Implementation of the Association Agreement between the EU and Ukraine.

The NBU implemented the measures stipulated in the documents in close cooperation with the International Monetary Fund, the EU project Strengthening the Regulation and Supervision of the Nonbank Financial Market (EU-FINREG), the USAID Credit for Agricultural Producers (CAP) project, the USAID Financial Sector Transformation Project, and other international partners.

In 2021, the NBU actively participated in finalizing the preparation of proposals for draft laws that fundamentally change the overall provision of financial services in Ukraine, introduce new rules for the operation of insurance companies, credit unions, leasing companies, and financial institutions. The proposed instruments of state regulation and supervision of the nonbank financial services market are based on best international practices and EU law, and harmonize Ukraine's national laws with the EU acquis in accordance with the Association Agreement between the EU and Ukraine. Some legislative initiatives have already been adopted by the Verkhovna Rada of Ukraine, while others are expected to be adopted in the near future.

- revising approaches to licensing insurers
- new requirements on conditions for the operation of insurers (in particular, in terms of the transparency of ownership structures and sources of funds of the qualifying holding founders/owners, the Strategy and plans for insurer's activities, and the proper organization of the management system, including

corporate governance)

- introducing new approaches to the required capital and requirements for an insurer's solvency
- strengthening regulation of insurance intermediaries' activities
- revising procedures for the supervision of insurers, introducing a risk-based and proportional approach to the supervision of insurers
- implementing effective procedures for withdrawing insurers from the market.

On 14 December 2021, the Verkhovna Rada of Ukraine adopted the Law of Ukraine *On Financial Services and Financial Companies* (No. 1953-IX). The law substantially revises provisions in the area of the regulation of the financial services markets.

It is based on a new model for the regulation and supervision of financial services markets that takes into account the provisions of international and European laws on:

- revising licensing requirements
- assessing the banking system's solvency and liquidity
- corporate governance
- the transparency of ownership structures
- applying risk-based and proportionality approaches
- improving regulations on consumer rights protection and control over market conduct, etc.

The law came into force on 11 February 2022. Its main provisions take effect on 1 January 2024.

On 18 November 2021, the Verkhovna Rada of Ukraine adopted the Law of Ukraine *On Insurance* (No. 1909-IX). Its provisions are designed to implement a new model for the regulation and supervision of the insurance market and provide for:

The law came into force on 19 December 2021. Its main provisions take effect on 1 January 2024.

The Draft Law of Ukraine *On Credit Unions* (registration number 5125 dated 22 February 2021) is expected to be adopted by the Verkhovna Rada of Ukraine at second reading. The draft law will

facilitate the implementation of new approaches to the regulation and development of credit unions in line with best international practices. Special attention should be paid to the following novelties introduced by the draft law:

- an increase in the number of services credit unions can provide to their members
- an expanded range of potential union members
- improved requirements for licensing and corporate governance
- the regulation of procedures for removing credit unions from the market
- an increased level of the capitalization and stress resistance of credit unions to improve the reliability of the sector and to strengthen customer trust.

On 4 February 2021, the Verkhovna Rada of Ukraine achieved a milestone by adopting a new Law of Ukraine *On Financial Leasing* (No. 1201-IX), which came into force on 13 June 2021. The law significantly expanded the use of leasing services as an alternative to long-term funding to purchase vehicles, equipment, other facilities and real estate.

It was a much-needed and long-awaited event for leasing companies and the industry in general, as the previous law was adopted in 1997 and was in force according to wording from 2004.

In addition, on 1 July 2021, the Verkhovna Rada of Ukraine adopted the Law of Ukraine *On Amending Certain Laws of Ukraine on Improving the Regulatory Framework for the Insurance of Agricultural Products Supported by the State* (No. 1601-IX). Its provisions are aimed at regulating the issues of state support for agricultural producers in terms of insuring agricultural products, developing a mechanism for providing state support for agricultural producers by covering some insurance payments under the insurance agreement, and setting requirements for market participants of the agricultural insurance market.

In late 2021, the Law of Ukraine *On the Partial Guarantee Fund for Agricultural Loans* (No. 1865-IX) was adopted. In line with the law, the Fund is not a state target fund but acquires the status of a financial institution and the right to provide financial services after being registered with the State Register of Financial Institutions, in accordance with a procedure established by the NBU.

During 2021, to support the stability of the nonbank financial market, the NBU continued the development and implementation of important regulations on licensing, disclosing ownership structures, reporting, inspections, consolidated supervision, imposing corrective actions, disclosing information, etc. The NBU held public consultations on all regulations, which resulted in the approval of the relevant Resolutions by the NBU Board.

1. The NBU Board Resolutions, which define the rules for applying corrective actions to nonbank financial institutions, taking into account the new laws on consumer rights protection during the past due debt resolution. The NBU outlined approaches to the application of corrective actions to appropriately and promptly respond to violations, and to properly protect the rights of financial institution's consumers and lenders. When applying corrective actions, the NBU adopted the proportionality approach, and defined corrective actions that could be applied to all participants of the nonbank financial services market, such as requiring violators to take measures to eliminate violations, imposing fines, and temporarily suspending or cancelling licenses.

At the same time, the NBU can apply to high-risk institutions, such as insurance companies and credit unions, additional corrective actions – namely approving a plan to recover the institution's financial stability, suspending an institution's top managers, and appointing a provisional administration. It includes the following:

- The Regulation *On the Application of Corrective Actions by the National Bank of Ukraine in the Area of State Regulation of Activities in the Nonbank Financial Services Markets* approved by NBU Board Resolution No. 12, dated 1 February 2021 (as amended by NBU Board Resolution No. 74, dated 9 July 2021)
- The Regulation *On Specifics of the Application of Corrective Actions by the NBU in the Form of Suspending Top Managers of a Financial Institution and Assigning a Provisional Administration* approved by NBU Board Resolution No. 13, dated 2 February 2021.

2. NBU Board Resolution No. 22 dated 26 February 2021, which approves the Regulation *On Organizing, Conducting, and Documenting the Findings of Inspections of Nonbank Financial Services Markets Participants*. The document

allows the NBU to regulate a procedure for conducting inspections and ensuring the transparency of this process, allowing participants to exercise their right to know the results of the inspection.

3. The NBU Board Resolutions that allow it to regulate licensing and registration on the nonbank financial services market, in particular:

- NBU Board Resolution No. 27 dated 30 March 2021 approved the Regulation *On Defining the Terms and Conditions for Providing Financial Services Subject to the Issuing of Respective License (Licensing Terms and Conditions)*. This document has basically left unchanged the approaches to licensing nonbank institutions that were implemented by the former regulator – the National Commission for the State Regulation of the Financial Services Markets – and allowed for the gradual preparation of the new approaches that were introduced by:
- NBU Board Resolution No.153, dated 24 December 2021 *On Approval of the Regulation on Licensing and the Registration of Financial Services Providers and Requirements for Providing Financial Services* that established new rules for the licensing and registration of financial services providers on the nonbank financial services market. The new rules apply a risk-based approach to the operation of nonbank financial institutions and imply a substantial revision of licensing terms and conditions, and licensing procedures.

4. NBU Board Resolution No. 30, dated 14 April 2021, approved the Regulation *On Requirements for the Ownership Structure of Financial Services Providers* that allowed the NBU to establish effective and comprehensive monitoring of the ownership structures of financial services providers, receive information about the real owners of financial services providers, and introduce the required procedures for timely communications between the NBU and financial services providers on compliance with the requirements for ownership structures. In addition, the NBU publishes information about the ownership structures of all nonbank financial institutions on its official website.

5. In line with the Law of Ukraine *On Consumer Lending* and the Law of Ukraine No. 1349-IX *On Amending Certain Laws of Ukraine on*

Consumer Protection during the Resolution of Past Due Debts dated 19 March 2021, the NBU approved a number of regulations that regulate the operation of debt collection market participants in Ukraine, such as:

- NBU Board Resolution No.75 *On Approval of the Regulation on the Registration of Debt Collection Agencies*, dated 9 July 2021
- NBU Board Resolution No. 77 *On Approval of the Regulation on the Qualification Requirements to Employees of Debt Collection Agencies*, dated 9 July 2021
- NBU Board Resolution No.78 *On Approval of the Regulation on the Application of Corrective Actions by the National Bank of Ukraine for the Violation of Laws on Protection of Consumer Rights in Financial Services by Debt Collection Agencies*, dated 9 July 2021.

6. The NBU Board approved Resolution No. 94 *On the Submission of Financial Statements by Nonbank Financial Services Market Participants Based on Financial Reporting Taxonomy, in Line With International Standards*, dated 17 September 2021 that allowed nonbank financial services market participants to submit financial statements and consolidated financial statements for 2020, and interim financial statements and interim consolidated financial statements for 2021 (Q1, H1, nine months) by 31 December 2021 without the risk that the NBU would apply corrective actions for their violating the terms for submitting such statements.

7. To implement Law of Ukraine No. 1601-IX *On Amending Certain Laws of Ukraine on Improving the Regulatory Framework for Insuring Agricultural Products Supported by the State*, dated 1 July 2021:

- NBU Board Resolution No.108 dated 20 October 2021 approved the Regulation on insuring agricultural products supported by the state, with the aim of regulating the procedure for insurers' activities in insuring agricultural products supported by the state, and setting requirements for providing access to insurers to such activities.
- NBU Board Resolution No.106 dated 20 October 2021, declared void certain regulations of the National Commission for State Regulation of Financial Services Markets and the Ministry of Agrarian Policy and Food that became obsolete and failed to comply with the abovementioned Law.

8. To regulate the reinsurance activities of nonresident insurers (reinsurers), NBU Board Resolution No. 107, dated 20 October 2021, approved the Regulation *On Reinsurance Provided by Nonresident Insurers (Reinsurer)*. The Resolution established new requirements when concluding reinsurance contracts with nonresident insurers (reinsurers).

9. NBU Board Resolution No. 110 *On Non-applying Corrective Actions for Failure to Comply with Requirements Limiting the Risk of Transactions with Financial Assets of Credit Unions Due to Quarantine* dated 21 October 2021 allowed the NBU to temporarily regulate the procedure and grounds for the non-application of corrective actions to credit unions for violating a requirement that limits the risks on transactions with financial assets concerning the share of nonearning assets due to the imposition of quarantine and anti-pandemic restrictions.

10. NBU Board Resolution No. 114, dated 5 November 2021, approved the Regulation *On the Disclosure of Information by Nonbank Financial Institutions* to ensure that clients of nonbank financial institutions can exercise their rights to information, including through setting requirements on the types of information that are to be disclosed by nonbank financial institutions, as well as the procedure for disclosing information by nonbank financial institutions on their websites and at the sites where the services are provided.

11. NBU Board Resolution No. 128, dated 2 December 2021, approved the Regulation *On Consolidated Supervision Over Nonbank Financial Groups* to establish the regulatory requirements for the procedure for the NBU's recognition, supervision, and de-recognition of nonbank financial groups, where the main activity is performed by financial institutions under the NBU's supervision.

12. NBU Board Resolution No. 156, dated 29 December 2021, approved the Regulation *On Streamlining the Provision of Auxiliary Services in the Financial Leasing Market*, which aims to rationalize the NBU's regulation of the organizational and legal framework for the two different categories of entities that provide auxiliary services on the financial leasing market: intermediaries and supporting services providers.

12. In 2021, the NBU Board approved Resolution No. 31, dated 16 April 2021, *On Declaring Void Certain Regulatory Documents of the National Bank of Ukraine*, which declares void the obsolete regulations issued by the previous regulators of the nonbank financial services market.

Furthermore, in 2021, the NBU presented for public discussion a number of draft documents that are important for nonbank financial services market participants. They will be approved in 2022 and specifically relate to:

- the required criteria and ratios for capital adequacy, solvency, liquidity, profitability, asset quality, and insurer operations risk
- setting the requirements for credit intermediaries of nonbank financial institutions, and for their activities in consumer lending
- setting the amount of compulsory insurance against civil liability with respect to the use of land motor vehicles
- resolving certain issues on compulsory insurance against civil liability with respect to the use of land motor vehicles.
- regulating the intermediary business in the insurance market
- revising required ratios and other requirements limiting the risks on transactions with the financial assets of guarantor companies.

In addition, the NBU is starting to develop a concept for the regulation of the factoring market, which involves the NBU's cooperation with both international institutions such as the IEC and the EBRD, and Ukrainian associations: The Ukrainian Alliance for Trade Finance and Factoring (UATFF) and National Anti-Corruption Bureau (NABU).

The NBU continues to develop a concept for the regulation of credit bureaus. As part of the effort, the NBU has held a number of meetings with representatives of credit bureaus and the IEC.

The NBU has always been open to communication with market representatives. In particular, the NBU organizes meetings for all nonbank financial services market participants to discuss and develop upcoming regulatory activities, and take into account the interests and needs of all stakeholders on the market. It also holds consultations on new regulations for the market.

For example, in summer 2021, the NBU held a meeting to explain the specifics of submitting documents to record information about entities in the register of debt collection agencies.

The NBU communicates with the mass media to inform them about updates to the regulation of the nonbank financial services market. In this regard, the NBU has prepared materials to explain a new procedure for regulating the past due debt, and a procedure for the registration of debt collection agencies. It has also issued updates on the regulation of credit unions.

The NBU constantly updates the “Regulation of nonbanking financial services market” section on its official website, which contains information about current laws and regulations that apply to the operation of nonbank financial institutions, as well as information about draft regulations.

Framework for Improving the Systems of Corporate Governance, Risk Management, and Internal Controls in Nonbank Financial Institutions

To fulfill the tasks set out in the Strategy of Ukrainian Financial Sector Development until 2025, the NBU has developed a Framework for building a system of corporate governance, risk management, and internal controls in nonbank financial institutions and nonbank financial groups. The Framework was approved by the NBU Board on 2 September 2021 and presented to nonbank financial services market participants on 9 September 2021.

The abovementioned framework, among other things, provided an opportunity for a discussion with nonbank financial services market participants about the problematic aspects of introducing the systems of corporate governance, risk management, and internal controls. It also provided an opportunity to start the gradual preparation of the market for the relevant new laws.

The provisions of the adopted Laws of Ukraine *On Financial Services and Financial Companies*, *On Insurance*, and the Draft Law *On Credit Unions* (detailed information about the laws and the draft law is provided in “Regulation of nonbanking financial services market” section) considerably improve current approaches to regulating

the systems of corporate governance, risk management, and internal controls.

The NBU is also preparing new documents that will allow to set the key requirements to the organization and effective operation of said systems.

Internal Control System (ICS)

The ICS will be integrated with the organizational structure and almost all internal processes of financial services providers. The procedure for the organization and general principles for operating the ICS will be defined in the relevant regulation, which will be developed in 2022, and in special NBU laws and regulations, and will also be detailed in the internal documents of financial services providers. All such documents and events aim to ensure the operation, define relationships, and support all components of the system and fulfill the defined goal (mission), strategic and other objectives, tasks, plans, and requirements for the activities of a financial services provider.

The key objective of implementing the ICS is to achieve the operational, informational, and compliance objectives of financial services providers, as set out in their Strategy and/or a business plan (if any).

The ICS will be built in line with COSO principles, and include the following mandatory components:

- control environment
- risk assessment
- control function
- control over information flows and communications
- monitoring of ICS effectiveness.

The division of roles in ensuring the proper operation of the ICS is based on three lines, specifically:

- the first line, which provides for the operation of structural units, front and back offices.
- the second line, which involves units/specialists that provide assistance in specific areas (risk and compliance management, actuaries, etc.).
- the third line, which is responsible for internal audits.

The NBU is planning to integrate the ICS into all of the internal processes of financial services providers. This will be achieved, in particular, by approving the internal documents of financial services providers, and by the management bodies of a financial services provider maintaining mandatory controls over their implementation, effectiveness, and compliance with the rules of internal control. In addition, the NBU will carry out supervision of the effectiveness of the operation of the ICSs of financial services providers.

The NBU is actively working on a Draft Regulation *On Organization of Internal Control Systems in Nonbank Financial Institutions and Nonbank Financial Groups*. At the same time, this Regulation will only determine requirements for the key guidelines and principles of building the ICS. The development and the implementation of the ICS, and the regulation of certain internal control issues, lie within the competence of financial services providers, taking into account the specifics of their line of business, business model, and the natures and types of the services they provide.

Risk management system (RMS)

The RMS will include a properly documented and approved policies, methodologies, and procedures for risk management. Additionally, it will support coordinated actions of RMS participants in defining a risk management Strategy, and organize the process of regularly identifying, measuring, monitoring, reporting, and mitigating the substantial risks inherent in the operation of nonbank financial institutions at all organizational levels.

The RMS must foresee:

- an organizational structure that determines the obligations, powers, and responsibility of individuals for risk management.
- internal documents regarding risk management issues
- a risk management information system and reporting
- tools for effective risk management.

Key aspects will also include a strengthened role for the Board/management bodies of a financial institution through formalizing their powers and responsibilities, including those related to approving strategic documents

on risk management, risk appetite statements, and the risk profile of a financial institution.

The NBU is planning to implement the system taking into account the three lines. The second line foresees that RMS participants (chief risk officer (CRO)/risk management unit, chief compliance officer (CCO)/compliance unit and actuary) are to be independent from the business units (first line) and internal audit (third line) and accountable to the Board/the highest management body of a financial services provider.

The risk management requirements will be set in such a way that they ensure the identification, monitoring, and control of risks, and allow measures to be taken to mitigate them.

Furthermore, risk assessments and risk profiles, stress testing of material risks, and improvements to the risk management information systems of institutions will be introduced by the NBU.

The system provides for the gradual implementation of the requirements, setting a risk-based approach to some segments and taking into account the institutions' social significance/importance in the segment. Work is underway to draft a regulation on the organization of the risk management system in nonbank financial institutions and nonbank financial groups that will define the main requirements for the RMS during a transitional period running until 1 January 2024, when the new extended requirements of the target model will come into effect.

Corporate Governance System

To improve the standards of corporate governance in nonbank institutions, the NBU is developing Methodological Recommendations for effective corporate governance on the nonbank financial services markets.

The NBU intends to approve them in 2022. The Methodological Recommendations take into account the best international practices. They include proportionate requirements for the corporate governance of participants in some segments of the financial services market (apart from professional participants of the stock market).

The organization of the corporate governance of financial services providers is expected to be based on the following principles:

- maximum support for the effective operation and interaction of the management bodies of financial services providers, so as to accumulate profits and protect interests of owners, consumers, and lenders
- a clear and transparent distribution of powers between the management bodies of a financial services provider, which will be reflected in the relevant internal documents
- Independence in decision -making
- and appropriate channels of communication on decisions taken
- independent judgements by managers within their powers .

The recommendations are non-binding, as the regulation of corporate governance largely falls within the remit of the laws on joint stock companies and economic partnerships. These laws do not establish any uniform requirements for a specific area, such as finance. However, after the new Laws of Ukraine On Financial Services and Financial Companies, On Insurance, and On Credit Unions come into force, the NBU will be authorized to set the rules for corporate governance through its own regulations.

Improving Deposit Guarantee Schemes for Financial Service Consumers

In 2021, the NBU started developing deposit guarantee schemes for credit union members and for making guaranteed payments on universal life insurance agreements. This is envisaged by the Strategy of Ukrainian Financial Sector Development until 2025, and by the Action Plan to implement the Association Agreement between Ukraine and the European Union, with a view to implementing Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes.

In accordance with a decision made by the Financial Stability Council on 18 February 2021, the NBU in March created a joint task force consisting of NBU and Deposit Guarantee Fund (DGF) representatives. The aim of the task force is to put forward the legislative proposals needed to create deposit guarantee schemes

for credit union members and to make guaranteed payments on universal life insurance agreements.

Establishing Deposit Guarantee Schemes for Credit Union Members

In 2021, the NBU prepared a model for launching deposit guarantee schemes for credit union members, while also drafting the legislative proposals required to set up guarantee schemes. The future policy of deposit guarantee schemes was discussed with international experts from the World Bank, the International Monetary Fund, and the USAID Mission in Ukraine.

The model for launching deposit guarantee schemes for credit union members has several stages:

Stage 1

Drawing up and passing a law: drafting a new version of Ukraine's Law on Deposit Guarantee Schemes.

Stage 2

Amending the NBU's and the DGF's regulations: drawing up draft regulations; discussing the projects with the DGF and market participants; adopting and making public relevant regulations.

Stage 3

Technical organization (by the DGF): supporting the process of building depositor databases and reporting – interacting with software developers and market participants; testing the quality of depositor databases; providing technical capabilities for the DGF to receive reports (web portal and other software); testing the submission of reporting files and their quality; setting requirements for the software and hardware systems of credit unions regarding the personalized accounting of depositors; setting requirements for the personalized accounting of depositors when they open deposit accounts; receiving letters from credit unions confirming that they have the technical capability required to create depositor databases, and to compile and submit reports to the DGF.

Stage 4

Entering participants in a registry and maintaining the registry; protecting depositor rights and informing the general public; monitoring activities on an ongoing basis; establishing provisional administrations; making guaranteed payments; resolution processes; liquidation processes.

Legislative proposals to set up deposit guarantee schemes for credit union members are expected to be put forward within six months after the coming into effect of Ukraine's Credit Union Law.

Setting up Schemes to Guarantee Payments on Universal Life Insurance Agreements

In 2021, while formulating relevant legislative proposals to guarantee payments on universal life insurance agreements, NBU and DGF representatives took the following steps:

- discussed the need to set up and launch schemes for making guaranteed payments on universal life insurance agreements in Ukraine
- studied the experience of other countries in introducing schemes for making guaranteed payments on universal life insurance agreements
- met with insurance market participants to discuss the risks, threats, advantages and opportunities of various guaranteed payment schemes
- discussed the deadline for introducing schemes to make guaranteed payments on universal life insurance agreements in Ukraine.

The World Bank is supporting these efforts through, among other things, providing technical assistance in creating a model for setting up and launching schemes to make guaranteed payments on universal life insurance agreements, taking into account the current state of the Ukrainian life insurance market.

With parliament passing a new Law of Ukraine On Insurance, which came into effect on 19 December 2021, the legislative proposals concerning schemes to make guaranteed payments on universal life

insurance agreements are expected to be finalized within six months after the World Bank stops providing technical assistance.

Regulation in the Financial Monitoring Sphere. Results of Financial Monitoring and Study of Compliance by Banks and Nonbank Institutions with Ukrainian Currency and Sanction Laws

The National Bank of Ukraine is one of the authorities tasked with state financial monitoring, pursuant to the Law of Ukraine *On Prevention and Counteraction of Legalization (Laundering) of the Proceeds from Crime, Terrorism Financing, and Financing the Proliferation of Weapons of Mass Destruction*.

The NBU performs regulatory and supervisory functions in the area of preventing and counteracting the legalization (laundering) of proceeds from crime, terrorism financing, and financing the proliferation of weapons of mass destruction (hereinafter financial monitoring or AML/CFT), so as to prevent banks and nonbank institutions being involved in the legalization of proceeds from crime, or in financing terrorism.

In 2021, scheduled onsite inspections could not be conducted due to the effect of NBU Board Resolution No. 34, dated 18 March 2020, *On the Suspension of Bank Onsite Inspections*.

Thus, under quarantine conditions, performing supervision over banks and nonbank institutions through offsite inspections is a priority activity.

During 2021, based on well-founded grounds, the NBU performed six unscheduled onsite inspections and 91 offsite inspections of banks, as well as two unscheduled onsite inspections and 235 offsite inspections of nonbank institutions.

The said measures were taken to ensure the proper supervision of compliance by banks and nonbank institutions with legal requirements on financial monitoring and the observance of currency and sanctions laws.

Inspection results:

Indicator	Number of inspections		
	total	including	
		banks	nonbank institutions
Inspections performed, of which:	334	97	237
scheduled onsite	0	0	0
unscheduled onsite	8	6	2
offsite inspections	326	91	235
Entities where violations were detected	233	32	201

Continuing its implementation of the principle of transparency, the NBU publishes an annual plan of onsite inspections on financial monitoring and compliance with currency and sanctions laws.

To ensure continuous supervision, the NBU is using existing instruments and implementing additional ones to exercise effective supervision over banks and nonbank institutions in the area of financial monitoring and compliance with the requirements of currency and sanctions laws under quarantine conditions.

Thus, in 2021, the NBU introduced a remote approach to conducting onsite inspections of banks and nonbank institutions in the area of financial monitoring, currency supervision, and supervision over the implementation and monitoring of personal special economic and other restrictive measures (sanctions) during quarantine. This is prescribed by Regulation No. 145, dated 17 December 2021, *On Specifics of Onsite Inspections in the Area of Financial Monitoring, Currency Supervision, Supervision Over the Implementation and Monitoring of Personal Special Economic and Other Restrictive Measures (Sanctions) During Quarantine*.

One of the state regulator's tasks in financial monitoring is solving the problems that banks and nonbank institutions face when they implement the requirements of the laws in said area. The NBU takes into consideration proposals from banks, nonbank institutions, and respective associations on problematic issues when exercising its regulatory functions in financial monitoring.

To that end, banks were allowed to postpone for the duration of the quarantine the implementation of certain requirements of the Regulation *On Conducting Financial Monitoring by Banks* approved by NBU Board Resolution No. 65, dated 19 May 2020, particularly with regard to updating

information about their customers. Nonbank institutions were also allowed to postpone implementation of certain requirements of the Regulation *On Conducting Financial Monitoring by Institutions*, approved by NBU Board Resolution No. 107, dated 28 July 2020, due to the introduction of quarantine. The possibility of this is stipulated in NBU Board Resolution No. 19, dated 15 February 2021, *On Measures to Prevent and Counteract the Legalization (Laundering) of Proceeds from Crime, Terrorism Financing, and Financing the Proliferation of Weapons of Mass Destruction Related to the Introduction of Additional Restrictive Anti-epidemic Measures*.

In addition, the NBU ensures that guidelines, along with methodological and other support, are provided to the reporting institutions in financial monitoring, and that such support includes the provision of recommendations and clarifications of the respective laws. The NBU's recommendations and clarifications on financial monitoring issues, as well as answers to the respective questions from banks and nonbank institutions, are published on the NBU's official website.

Cooperation with the State Financial Monitoring Service of Ukraine on financial monitoring issues

In 2021, under the Cooperation and Information Sharing Agreement between the State Financial Monitoring Service of Ukraine (SFMSU) and the NBU, the NBU sent 26 letters to the SFMSU regarding financial transactions of customers of 21 banks and four messages on financial transactions of customers of seven nonbank institutions. The letters and messages contained information obtained in the course of financial monitoring that may point to suspicious activity involving the legalization (laundering) of proceeds from crime, terrorism financing, and financing the proliferation of weapons of mass destruction

as well as information on large scale transactions of bank customers that was obtained in the course of supervision of compliance with the currency law.

The SFMSU informed the NBU about the results of its analysis of the information obtained from the NBU, with the aim of further using it for supervision purposes.

Imposing Corrective Measures Based on the Results of Financial Monitoring and Supervision of Compliance with Currency and Sanctions Laws

On the basis of identified violations, the NBU imposed corrective measures proportionate to the violations committed. The NBU regularly releases information on corrective measures imposed on banks and nonbank institutions through press releases published on its official website. Such information contains the name of the bank or nonbank institution and the imposed corrective measures, and provides a summary of the identified violations and grounds for the corrective measures. If a decision to impose corrective measures is appealed against in court, such complaints and any information on their results are also published.

In 2021, corrective measures imposed on banks and nonbank institutions for violating the currency and financial monitoring laws included the following:

Indicator	Number
Warning letter to bank	13
Warning letter to nonbank institution	49
Fine imposed on bank	five decisions totaling UAH 11,593,000.00
Fine imposed on nonbank financial institution	nine decisions totaling UAH 1,259,700.00
Restriction, termination or suspension of certain types of transactions performed by a bank	1
Suspending a bank official from their position	1
Revocation of licenses and/or other documents that give the right to perform activities and give such nonbank institutions the status of a reporting institution	1
Entering into a written agreement with a bank	1

Cooperation with the International Monetary Fund

In 2021, the International Monetary Fund (hereinafter the IMF) continued its cooperation with Ukraine, proving the IMF's support for the Ukrainian authorities, and the NBU in particular. Within the current cooperation framework between the IMF and Ukraine, the NBU is to continue work in several areas, one of which is the strengthening of the banking supervision system and the regulation of nonbank financial sector, including in the area of financial monitoring. To that end, cooperation with the IMF is to be continued in the form of technical assistance. In particular, the plans include joint measures to further improve the existing model of risk assessment of banks

when performing supervision in accordance with the laws of Ukraine on financial monitoring.

The plans for cooperation with the IMF also include the implementation of risk-based supervision over nonbank institutions in the area of financial monitoring, applying the principle of proportionality, prospective reviews, professional judgments, and early identification of and response to potential risks.

Oversight of Financial Market Infrastructures

Oversight is a central bank function aimed at ensuring the continuous, reliable, and effective operation of financial market infrastructures.

According to international oversight standards²¹, the following five financial market infrastructures are subject to oversight: payment systems, central securities depositories, securities settlement systems, central counterparties, and trade repositories.

In 2021, the adoption of the Law of Ukraine *On Financial Services and Financial Companies* by the Verkhovna Rada of Ukraine was a key event for development of the oversight of stock market infrastructure. This Law amends the laws of Ukraine *On the National Bank of Ukraine* and *On Capital Markets and Regulated Commodity Markets* on extending the oversight function in Ukraine to the central securities depository, securities settlement systems, central counterparty, and trade repository.

Another important event for oversight in 2021 was the adoption of the Law of Ukraine *On Payment Services*. In particular, the new law extends the oversight function, along with the payment systems, to new entities in the payments infrastructure, namely payment service providers and electronic money institutions.

In 2021, the NBU conducted the following activities as part of its payment system oversight:

1) a comprehensive assessment of the PROSTIR National Payment System (hereinafter referred to as the PROSTIR NPS) for its compliance with international oversight standards. The assessment of the PROSTIR NPS was for the first time conducted according to the recommendations of IMF experts. Based on the results of the comprehensive assessment, the NBU drew up recommendations on streamlining payment system operations according to international oversight standards – particularly those on risk management

2) offsite monitoring of the overseen entities (payment system operators, payment system participants, and payment service providers) through the collection, categorization and analysis of data on their activities. The data obtained on activities of the overseen entities was used to assess their share and role in the Ukrainian payments market, and to identify important entities subject to oversight. This enabled the NBU to focus on systemically important financial market

infrastructures when performing oversight in line with international standards, as said infrastructures have a significant impact on the country's financial system

3) onsite monitoring of overseen entities is conducted to ensure compliance with Ukrainian laws, and to detect and prevent risky operations. The main violations detected by onsite monitoring included the following:

- inaccurate reporting of financial statements on the activities of payment systems and other participants, the submission of which is foreseen by NBU regulations
- services provided in violation of rules approved by the NBU
- failure to comply with the requirements on ensuring operational continuity and data protection
- failure to comply with the requirements for the storage of data on each money transfer transaction executed in the payment systems.

The NBU imposed corrective measures on overseen entities in response to the detected violations, as set out in Article 41 of the Law of Ukraine *On Payment Systems and Money Transfers in Ukraine*.

As part of the implementation of the oversight function on stock market infrastructure, and in order to implement the road map of Ukraine's Financial Sector Development Strategy towards 2025, the NBU conducted the following:

1) a comprehensive assessment of the National Depository of Ukraine, which exercises the functions of the central securities depository and securities settlement system, regarding its compliance with international standards of oversight

2) a comprehensive assessment, started in 2020, on the compliance of the NBU's depository with PFMI international standards.

Based on the assessment results for said infrastructure, the NBU developed recommendations aimed at improving their activities and bringing these activities into

²¹ Principles for Financial Market Infrastructures (PFMI) drafted by the Committee on Payments and Market Infrastructures of the Bank for International Settlements and the Technical Committee of the International Organization of Securities Commissions.

line with international standards of oversight, particularly those regarding risk management and making activities more transparent.

Ensuring Operational and Reporting Transparency of Financial Sector Participants

In 2021, the financial regulators continued to implement the Financial Reporting System that enables e-collection and processing of the financial information provided by the reporting entities. This work is performed in compliance with the requirements of the Memorandum of Understanding No. 102/15 Regarding Development and Implementation of Financial Reporting System dated 18 December 2017. The aim of the document is to define the limits of cooperation and interaction between the regulators taking into account the provisions of the Law of Ukraine On Accounting and Financial Reporting in Ukraine.

A new Financial Reporting System in iXBRL electronic format according to the IFRS Taxonomy UA should increase the market transparency through provision of a comparative reliable financial information to the market participants and regulators. The Financial Reporting System is based on the resources of the National Securities and Stock Market Commission. It is built under the “single window” scheme at the Center for Collecting Financial Statements, to which other regulators will be connected. The financial reporting shall be submitted in the international format understandable to all foreign investors and stakeholders that follow the developments in the Ukrainian financial sector.

Within the framework of the EU project Introduction of EU Practices on Accounting, Financial Reporting, and Audit in Ukraine (EU-FAAR) the Ukrainian IFRS 2020 Taxonomy under XBRL format was developed and prepared for the official publication in April 2021.

The NBU is the project recipient under the component Financial Reporting in Single Electronic Format. It is aimed at ensuring the disclosure of the standardized financial reporting in a single electronic format by all business entities obliged to do it according to the Law of Ukraine On Accounting and Financial Reporting in Ukraine.

In 2021 the process of implementing the reporting under XBRL IFRS Taxonomy started in Ukraine. The public interest entities submitted their first financial reports with the use of the cutting-edge XBRL international format according to the IFRS Taxonomy.

XBRL (eXtensible Business Reporting Language) is an open international standard of business reporting in electronic format.

Its implementation provides a number of benefits, including:

- increased transparency of the financial reporting and performance indicators of the companies
- free and accessible exchange of business information
- higher investment attractiveness due to provision of the globally acknowledged, clear, and comparable structured financial data.

The introduction in Ukraine of the IFRS Taxonomy in iXBRL format for compiling the IFRS financial reports in the international XBRL format is an important step to improve the standards of information disclosure by the reporting entities, including banks and other financial institutions. To the Center for Collecting Financial Statements operated by the National Securities and Stock Market Commission, about 5,000 financial reports in a single iXBRL electronic format under the IFRS Taxonomy were submitted for the public web portal of the Financial Reporting System. Nearly 2,300 of those reports were submitted by the financial sector reporting entities regulated by the NBU. It is the evidence of the undeniable progress of Ukraine in ensuring the operational and reporting transparency of the market participants in financial sector in 2021, which was achieved by the NBU in cooperation with the EU-FAAR project and acknowledged by XBRL International.

The NBU in collaboration with the EU-FAAR project efficiently works on improving the financial sector reporting that enables Ukraine’s joining the international community of states applying the high-quality XBRL financial reporting standards.

At present, the introduction of the financial reporting in a single electronic format according to the requirements of the International Accounting Standards Board is one of the priority reforms in the financial sector.

provisions aim to harmonize Ukrainian laws with EU legislation related to financial services, and to increase the reliability of the infrastructure elements of the domestic capital markets.

In complying with the law, the NBU brought its existing regulations into line with the relevant EU laws, while also adopting new regulations. More specifically, in 2021, the NBU:

- streamlined the procedure for making settlements in delivery-versus-payment transactions with securities, using the NBU's System of Electronic Payments (SEP) technology. This enabled capital market participants to conduct "settlements in central bank money," which use securities accounts opened by the parties directly with the NBU. These regulations introduce global best practices in settling securities, while also making these settlements more reliable, and boosting investor confidence in Ukrainian capital markets.
- expanded technological interaction with the key elements of capital markets infrastructure. In complying with the law, the Settlement Center for Servicing Financial Market Agreements (the "Settlement Center") stopped conducting banking activities and became a nonbank financial institution. On 1 July 2021, the NBU opened and started servicing the cash accounts of the Settlement Center and the Central Securities Depository (the "Central Depository"). The NBU also deepened information exchanges with the Central Depository by requiring the depository to provide it with information about the registered issues of NBU's certificates of deposit.

In 2021, the NBU worked with Clearstream Banking Luxembourg, an international central securities depository, to, among other things:

- expand the range of services for settling cross-border transactions
- increase the list of financial instruments that are accessible to foreign investors through a link established between the depositories
- optimize domestic currency remittances by foreign investors via nonresident banks' correspondent accounts.

In 2021, NBU Depository representatives actively participated in an international task force set up to implement a Memorandum of Understanding entered into by the Government of Ukraine, the EBRD, the American Chamber of Commerce in Ukraine, and USAID. The task force aimed to analyze the technical and economic indicators of the existing key elements of trade and post-trade infrastructure, as well as develop an optimal model for capital market infrastructure and organized commodity markets. This model should ensure the sustainable development of Ukraine's capital markets, which, in turn, will provide funds for the long-term financing of domestic companies, while also expanding the list of financial instruments. This will help increase foreign direct investment in Ukraine. With respect to post-trade infrastructure, in 2021, the task force laid the groundwork for creating a model of clearing infrastructure for capital markets and organized commodity markets. It also started discussing the depository component and the prospects for setting up a trade repository.

In addition, with a view to developing capital market infrastructure, on 21 January 2021 the Settlement Center launched a repo with a risk control service. This enabled stock market participants to enter into repo agreements involving government securities, using the services of a central counterparty to reduce risks. The new service turned out to be in reasonable demand with professional capital market participants, as the Settlement Center acts as a central counterparty and uses an effective

system of risk management. Over the year that has passed since the launch of this new service, open positions in repos with risk control exceeded UAH 1 billion.

This product was developed in cooperation with the NBU and with the active support of market participants. The NBU holds shares in the Settlement Center (over 80% of total shares).

Creating Liquid Financial Instrument Markets

In 2021, the NBU was involved in efforts to help introduce new and to develop existing financial instruments.

More specifically, in complying with the law and with a view to enhancing the efficiency and reliability of the capital markets, the NBU adopted regulations that, among other things:

- set the terms of, and the procedure for, its support for a central counterparty's liquidity
- established the criteria for banks in which the Central Securities Depository and clearing houses can open foreign currency accounts, as set forth in the relevant laws
- brought the terminology used in its regulations related to the money, FX and stock markets into line with the Law of Ukraine On Capital Markets and Regulated Markets.

What is more, the NBU revised the provisions of the above regulations to align them with the Law of Ukraine On Capital Markets

and Organized Commodity Markets. In particular, it included the settlement of derivative contracts in the list of transactions that are conducted with nonresidents' (legal entities' and private individuals') domestic and foreign currency current accounts, and with the EBRD's and nonresident banks' domestic currency correspondent accounts opened with Ukrainian banks.

The NBU also set up a new procedure for approving the specifications of derivative contracts in the money market. The new procedure sets forth:

- the minimum requirements for the set of documents that are to be submitted by a regulated market operator to the NBU
- the terms for considering these documents, and the grounds on which the NBU can refuse to approve the specifications of a derivative contract for a regulated market operator
- actions a regulated market operator should take if, after having the specifications of a derivative contract approved by the NBU, the central bank introduces new safeguards in line with the Law of Ukraine *On Currency and Currency Operations*.



2

Digital Finance as a Driver for Digitalization of the Economy

Goal 5.

Developing Cashless Economy

Regulation of the Payment Market

In 2021, the NBU actively worked on establishing conditions for the development of the payment market of Ukraine.

As of the end of 2021, 53 payment and settlement systems were operating in Ukraine, including:

29 systems established by residents:

- 8 systems operated by banks (1 domestic system and 7 international ones)
- 21 systems operated by NBFIs (14 domestic systems and 7 international ones)

15 systems established by nonresidents:

- 6 international card payment systems
- 9 international money transfer systems

7 intrabank payment systems

2 state-operated payment systems.

Furthermore, 34 payment service providers operated on the Ukrainian payment market.

Registration of Payment Systems, Their Participants, and Payment Service Providers

In 2021, new players appeared on the payment market. Thus, the NBU registered three payment systems established by residents:

- CORDPAY international payment system operated by JSCB CONCORD JSC
- CASCAD domestic payment system operated by FC UP.ME FINANCE LLC
- PaySystems domestic payment system operated by UKRCARD LLC

four payment systems established by nonresidents:

- JCB Payment System international card payment system operated by JCB International Co., Ltd. (Japan)
- international payment system DINERS CLUB INTERNATIONAL operated by DINERS CLUB INTERNATIONAL LTD (the USA).
- PAYSERA international fund transfer system operated by PAYSERA LT, UAB (Lithuania)
- TransferGo international fund transfer system operated by TRANSFERGO LTD (UK)

four new payment service providers:

- DIGITAL FINANCE LLC
- FINT LLC
- TECH-SOFT ATLAS LLC
- REBEL CAPITAL LLC.

Licensing for Conducting Money Transfers in Hryvnia without Opening Accounts

As of 1 January 2022, 70 nonbank institutions held licenses to make money transfers in hryvnia without opening accounts.

In 2021, the NBU issued six licenses to the following nonbank institutions without opening accounts:

- FC MASON LLC
- FC REZONANS-KAPITAL LLC
- FC KOSHT LLC
- PAYTECH UKRAINE LLC
- FC B.MONEY LLC
- FC CC LOAN LLC

Payment market (data for 1 January–31 December 2021)

Indicator	Number
International payment systems, of which:	15
card systems	6
fund transfer systems	9
Domestic payment systems	38
Nonbank	21
Banking	8
Intrabank	7
state-owned	2
Payment systems registered in 2021, of which:	7
payment systems established by residents	3
international payment systems established by nonresidents	4
Payment systems whose registration was revoked in 2021, of which:	
payment systems established by residents	2 ²²
international payment systems established by nonresidents	2 ²³
Payment service providers	34
Payment service providers registered in 2021	4
Payment service providers whose registration was revoked in 2021	4 ²⁴

To implement the Strategy of Ukrainian Financial Sector Development until 2025 and the NBU Strategy 2025, the NBU took a number of steps to improve payment market regulation.

The regulator has simplified requirements to the procedure for opening accounts to bank customers as follows:

Persons opening accounts were given the right to show the bank's authorized person an e-passport/e-passport for travelling abroad/e-birth

certificate/tax payer's ID number on an electronic media that is compatible with Diia mobile application.

Entities were given the right to open current accounts in favor of individuals, by their consent, for making some types of payments (wages/salaries, dividends, scholarships, pensions, social assistance, repayment of overpaid amounts, and other payments).

In addition, we have cut the list of documents to be submitted by nonresident legal entities/

²² At the request of the payment system operator on termination of the provision of payment system services..

²³ 1 – at the request of the payment system operator on termination of the provision of payment system services, 1 – due to failure of the payment system to provide money transfer services in Ukraine within 180 calendar days.

²⁴ 3 – due to ceasing to provide services by the payment service provider for more than 180 calendar days and failing to resume the operation during 90 calendar days after the NBU's notification about it, 1 – at the request of the payment service provider.



foreign diplomatic, consular, trade, and other official representative offices that have immunity and diplomatic privileges when opening accounts (the requirement to submit a copy of the document confirming registration of the nonresident legal entity as a flat tax payer with the relevant supervisory authority/copy of the certificate of the Ministry of Foreign Affairs of Ukraine on the accreditation of the representative office in Ukraine was cancelled).

Banks now have the right to transfer funds from the escrow account to the person(s) designated by the beneficiary, if the beneficiary provides the bank with a written instruction.

In 2021, the regulator continued revising the regulatory framework for the payment market operation. Specifically, the procedure was set for:

- 1) opening by banks of UNO's accounts and escrow accounts to private notaries in order to perform notarial acts to accept the amounts of debts from debtors
- 2) issuing savings certificates instead of certificates of deposit.

In 2021, the NBU improved a procedure for Ukrainian banks to open current accounts with a special regime for individuals who have the right to use one-time (special) voluntary declaration, credit cash in domestic and foreign currencies or bank metals to such accounts, and close them.

In accordance with the legislation on the all-Ukrainian referendum, the NBU introduced:

- the procedure for opening and closing by banks of accounts of the initiative group's fund, fund for agitation for the initiative of a political party, public organization, fund of the all-Ukrainian referendum of an initiative group, as well as accounts of political parties and public organizations
- the obligation for banks to inform the Central Election Commission and the National Agency for Corruption Prevention on the opening of the current account of the initiative group's fund, fund of the all-Ukrainian referendum of the initiative group, current account of the fund for agitation for the initiative of a political party, public organization, and details on said accounts.

Besides, in 2021, the NBU settled the issues related to:

- the procedure for execution by banks of settlement documents of debt collectors, following the transition of SEP and banks to work in the 23/7 mode
- giving by banks relevant powers to the persons who independently deliver to the bank settlement documents for forced writing off/collecting the funds from clients' accounts and/or documents for seizure/removal of seizure of the funds.

The procedure for issuing payment cards and effecting card transactions was updated as follows:

- the options for using corporate payment cards (electronic payment means) by businesses were expanded. In particular:
 - Businesses (economic entities) were given the right to independently establish the persons that shall have the right to use corporate payment cards linked to its account.
 - The responsibilities of the economic entity and corporate payment card holder were split.
 - The procedure was simplified for obtaining the payment card by an authorized person/representative of an individual account holder.

In order to facilitate auctions on sales of privatization objects (pursuant to the Law of Ukraine *On Privatization of State and Municipal Property*) and attract foreign and domestic investment in Ukraine's economy, we approved bank guarantee forms and terms of bank guarantees to be provided by banks to participants of auctions on sales of objects of the state or municipal property.

The following issues related to interbank transfers within Ukraine were settled:

- The requirements to the procedure for the execution by banks and the NBU of the documents on the seizure of bank funds in its correspondent account in domestic currency were excluded.
- The requirements to the procedure for executing by banks of the documents related to the seizure of the bank's funds in its correspondent accounts in foreign currencies were excluded.²⁵

25 To comply with Law of Ukraine No. 1587-IX prohibiting the seizure of funds in correspondent accounts of a bank.

- The rules related to the submission to the NBU of the samples of signatures of the persons authorized to manage the bank's correspondent accounts, as well as the procedure for certification of said signatures, were updated.

In addition, we have updated the procedure for issuing licenses on transferring funds in domestic currency without opening accounts in order to unify the requirements for financial service providers subject to the NBU's regulation (in particular, in terms of requirements for the ownership structure of such institutions).

Creating the Draft Vision for an Instant Payment System

While implementing the instant payment system in Ukraine in 2021, the NBU was working on the Draft Vision for an Instant Payment System. The work was supported by the EU Twinning Project Strengthening the Institutional and Regulatory Capacity of the National Bank of Ukraine to Implement the EU-Ukraine Association Agreement, and by the World Bank, and was carried out in close cooperation with representatives of the banking community.

By creating a system of instant payments in Ukraine, the NBU primarily aims to enable Ukraine's citizens to make quick, affordable, and secure account-to-account transfers using user-friendly, cutting-edge and innovative access channels and payment initiation methods.

The implementation of the system will further develop the payment infrastructure, enhance competition in the payments market, meet the expectations of the market and customers, improve financial literacy, and promote cashless payments.

In April 2021, as part of the Twinning Project Strengthening the Institutional and Regulatory Capacity of the National Bank of Ukraine to Implement the EU-Ukraine Association Agreement, the NBU, together with international experts from EU member states, held the Instant Payment Systems expert forum. At the forum, the NBU presented to the Ukrainian financial market participants its vision for an instant payments system in Ukraine, as well as further steps and challenges in its implementation. Banks, nonbank financial institutions, and associations

were introduced to the European instant payments systems of Poland, Hungary, and Lithuania, and the SEPA instant payments solution for the euro area based on the SCT Inst scheme, as well as the NBU's progress in establishing a similar system in Ukraine. At the event, the NBU for the first time received feedback from market participants.

In order to meet the needs of users and participants of the financial market that are specific to our country, the NBU has established the most important aspects in building the system – creating a partnership dialogue to obtain feedback from financial market participants, and engaging them in building the system.

Throughout 2021, the NBU held a series of meetings with financial market participants to discuss the specific features and benefits of the future instant payments system.

The results of these meetings laid the groundwork for drafting a Vision for an Instant Payment System in Ukraine, which was published in October 2021 for public discussion.

To date, the NBU has received feedback from financial market participants on the Draft Vision for an Instant Payment System, and it is continuing its efforts to improve it. A lot of work lies ahead in identifying the technological specifics and functionalities of the system: unique account identifiers, ways to exchange payment details between payers and payees (through QRs code, Request-to-Pay), etc.

Development of Cash and Payment Infrastructure

Payment Card Market in Ukraine

In 2021, the volume of payment card transactions continued to increase (both cashless payments and cash withdrawals). The total number of transactions involving payment cards issued by Ukrainian banks was 7,817.1 million worth UAH 5,091.7 billion. This is the growth by about a third (30.3% and 28.7% increase, respectively) from the previous year.

Most of these transactions were conducted in the proprietary networks of issuing Ukrainian banks (52.9% in number and 73.5% in value of all



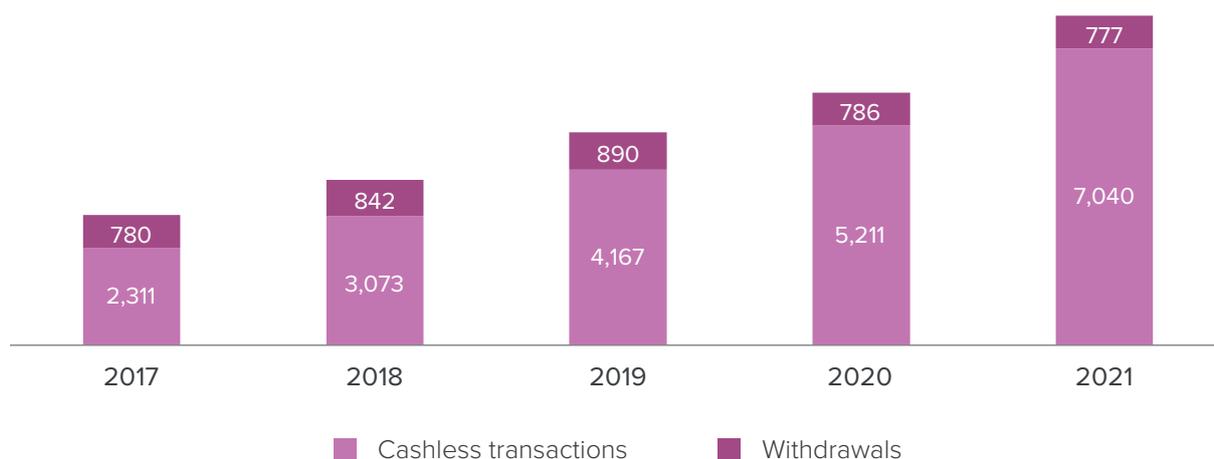
card transactions). The networks of other resident acquirers serviced 43.3% of card transactions (in number) that made 22.8% in terms of value.

Outside Ukraine, transactions with cards issued by resident banks remained as low as 3.8% in number and 3.7% in value. At the same time, the share of domestic transactions with cards issued by nonresident banks made only 2.3% in both number and value.

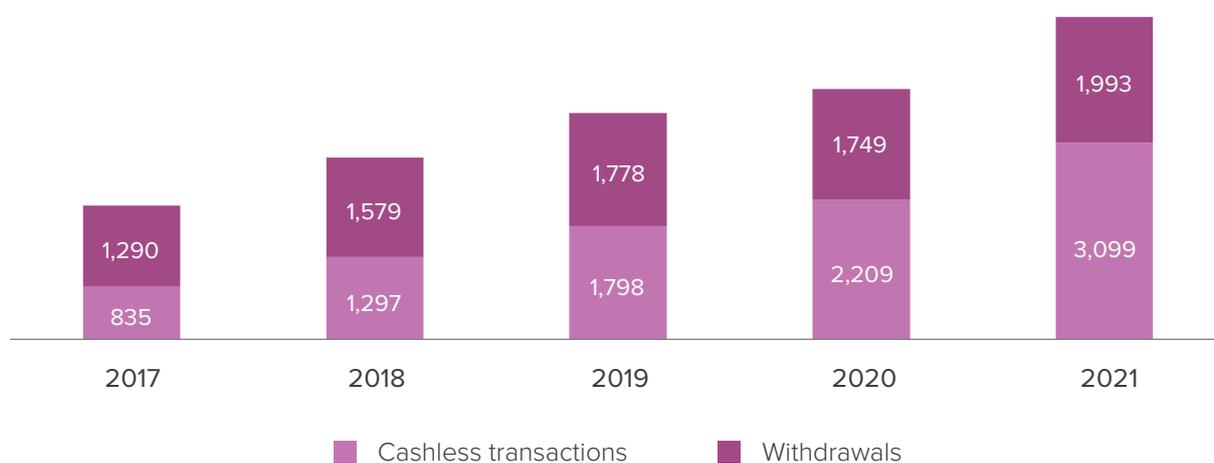
In 2021, the number of cashless transactions with payment cards increased in annual terms by 35.1% to 7,039.9 million (90.1% of the total number transactions), and their value – by 40.3% to UAH 3,099.1 billion (60.9% of the total value of card transactions).

At the same time, in 2021, the number of cash withdrawals with payment cards decreased by 1.1% yoy, whereas their value increased by 14.0% yoy.

Number of payment card transactions, millions



Value of payment card transactions, UAH billions

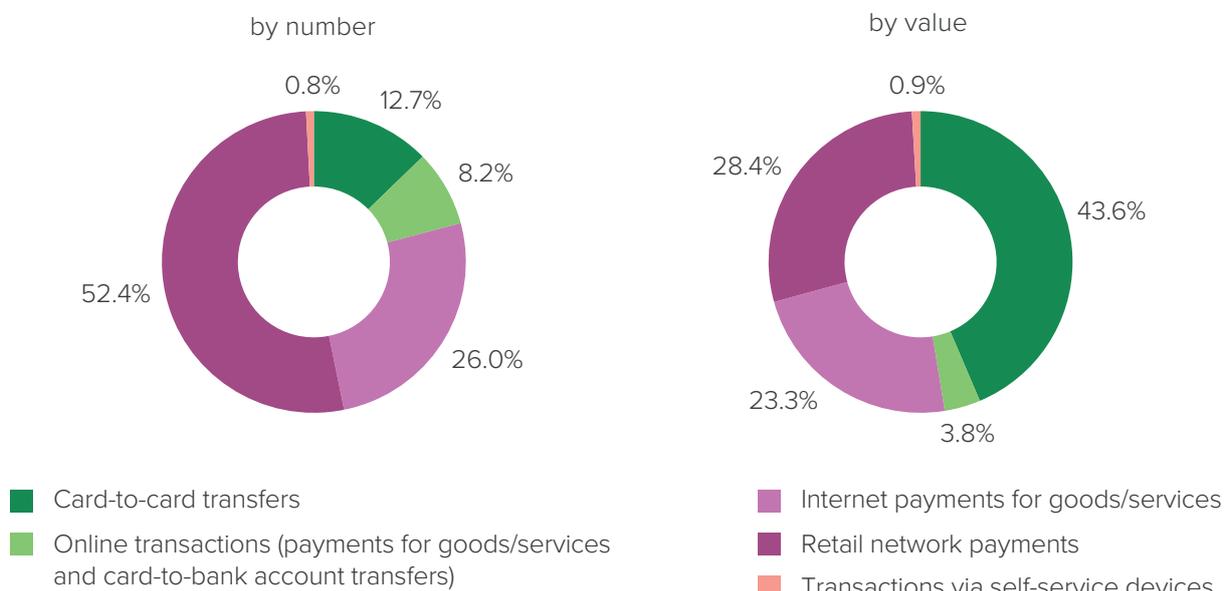


More than a half of cashless payment card transactions (52.4%) were performed in retail networks, and their amount made 28.4% of the value of all cashless transactions.

At the same time, about 75% of the number and value of said transactions were carried out using contactless payment technology and NFC technology.

In 2021, 43.6% of the value of cashless payment card transactions were card-to-card transfers and accounted for 12.7%.

Cashless card transactions in 2021



Payment Cards Issuance and their Types

The total number of cards issued by Ukrainian banks stood at 89.1 million as of the end of 2021. It was 21.3% more than as of the end of 2020. In December 2021, the number of payment cards used for debit operations was 46.3 million (52.0% of the issued cards).

In 2021, the number of contactless payment cards used for transactions grew. In December 2021, their number increased by 51.8% yoy to 20.0 million cards from 13.2 million in December 2020. In general, about a half (43.2%) of payment cards used in December for debit transactions were contactless cards.

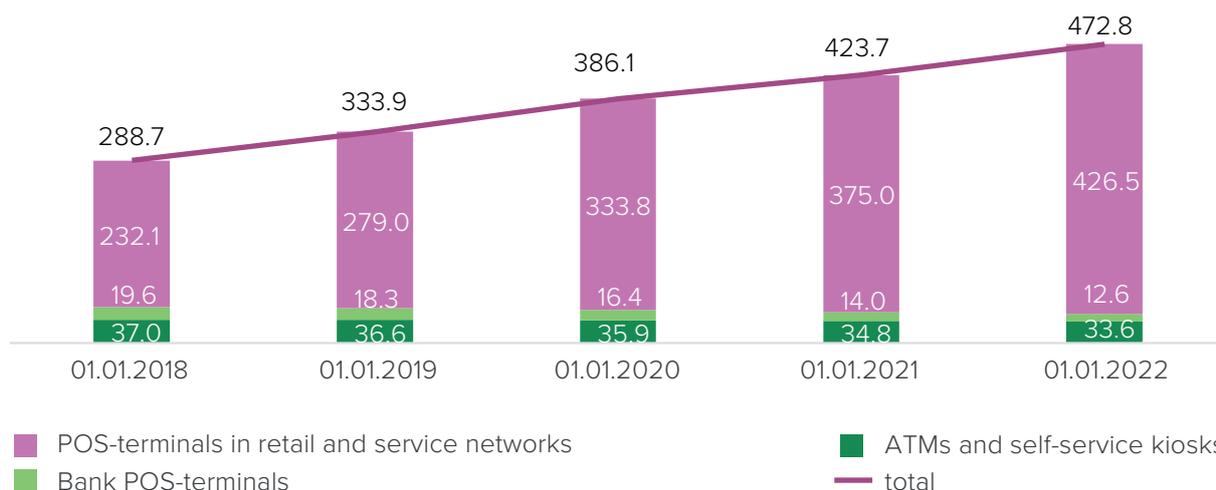
As of the end of 2021, most payment cards were issued in the international payment system MasterCard (50.7 million, or 56.9%). The second and the third places in terms of number of issued cards were VISA (37.8 million, or 42.4%)

and National Payment System PROSTIR (0.6 million, or 0.64%). In 2021, a share of other card systems operating in Ukraine was 0.04%. The leaders in issuance of cards were CB PrivatBank JSC (45.1% of all issued cards), Oschadbank JSC (16.6%), and Universal Bank JSC (10.6%).

Payment Infrastructure

In 2021, the payment infrastructure continued to develop. Compared with 2020, the number of POS terminals in retail and service networks grew by 13.7% to 426,500, whereof 393,600 (92.3%) were contactless terminals. Overall, the number of POS terminals in retail and service networks in the last five years almost doubled, from 232,100 to 426,500. At the same time, there was a gradual annual drop in the number of banking devices (ATMs, self-service kiosks, and POS terminals), from 56,600 to 46,200.

Payment infrastructure, thousands



The number of POS terminals per 1 million of resident population of Ukraine²⁶ during the year increased to 10,700 from 9,400 (by 13.8%). The distribution of POS terminals by regions remains quite unequal. The top regions are the city of Kyiv (26,300 terminals per 1 million residents), the Kyiv oblast (16,400 terminals), and the Dnipropetrovsk oblast (12,900 terminals). The least number of terminals per 1 million residents is in the Zakarpattia (6,300 terminals), Donetsk (4,300 terminals), and Luhansk (2,600 terminals) oblasts.

CB PrivatBank JSC, Oschadbank JSC, and Raiffeisen Bank Aval JSC accounted for the majority of POS terminals (57.2%, 18.7%, and 9.0%, respectively).

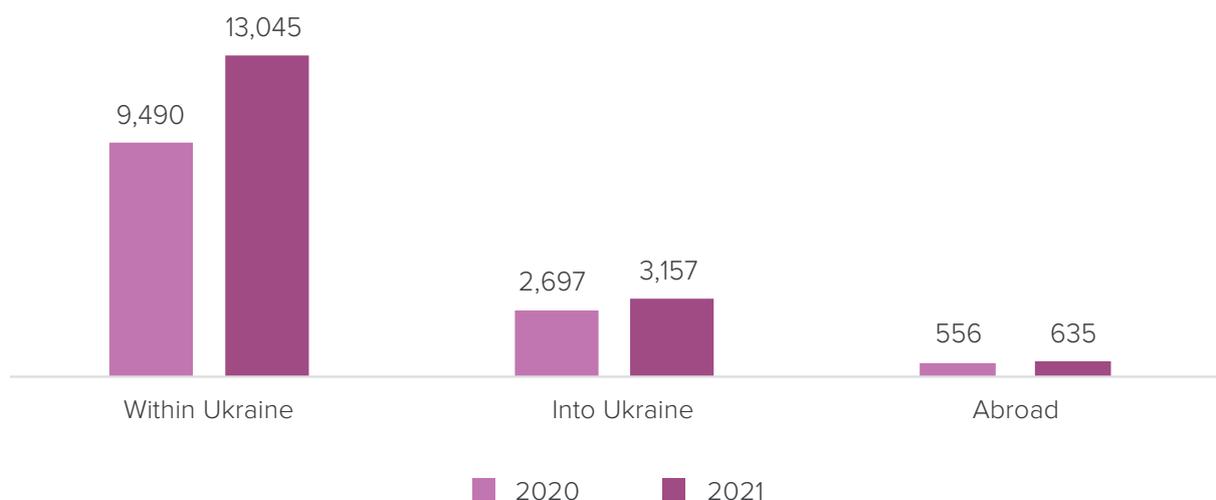
Operation of Money Transfer Systems in Ukraine

In 2021, 39 money transfer systems were operational, including 31 systems established by residents and 8 by nonresidents.

In 2021, the following volumes were remitted via money transfer systems established by both residents and nonresidents:

- within Ukraine – UAH 355.4 billion (the equivalent of USD 13,045.1 million)
- into Ukraine – the equivalent of USD 3,157.1 million
- abroad – the equivalent of USD 635.0 million.

Volumes of transfers via money transfer systems, USD millions (equivalent)



Operation of Money Transfer Systems Established by Residents

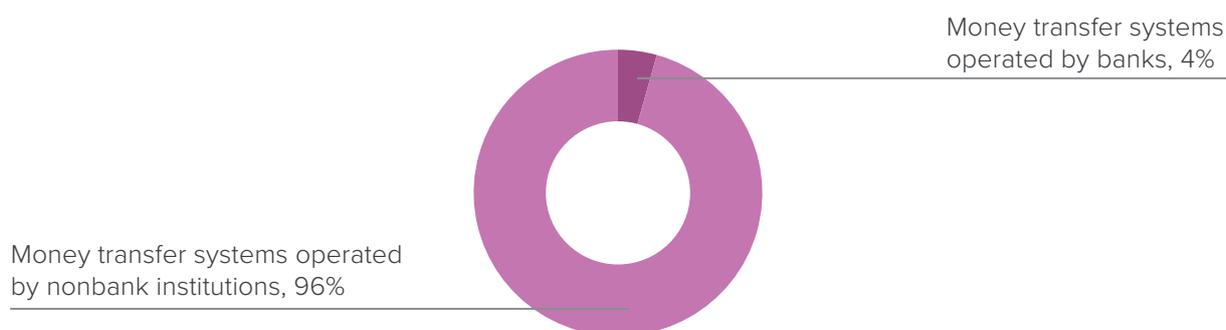
In 2021, seven money transfer systems established by banks, 18 systems set up by nonbank institutions, and 6 intrabank

transfer systems provided money transfer services.

In 2021, the following amounts were transferred via money transfer systems established by banks and resident nonbank institutions:

- within Ukraine – UAH 355.3 billion (the equivalent of USD 13,042.1 million)
- into Ukraine – the equivalent of USD 505.3 million
- abroad – the equivalent of USD 16.8 million.

Distribution of transfers via money transfer systems within Ukraine in 2021 (by transfer amount)



In 2021, money transfer systems NovaPay (UAH 144.4 billion) and Poshtovyi Perekaz (UAH 59.0 billion) became the leaders based on the sum of domestic transfers.

Operation of Money Transfer Systems Established by Nonresidents

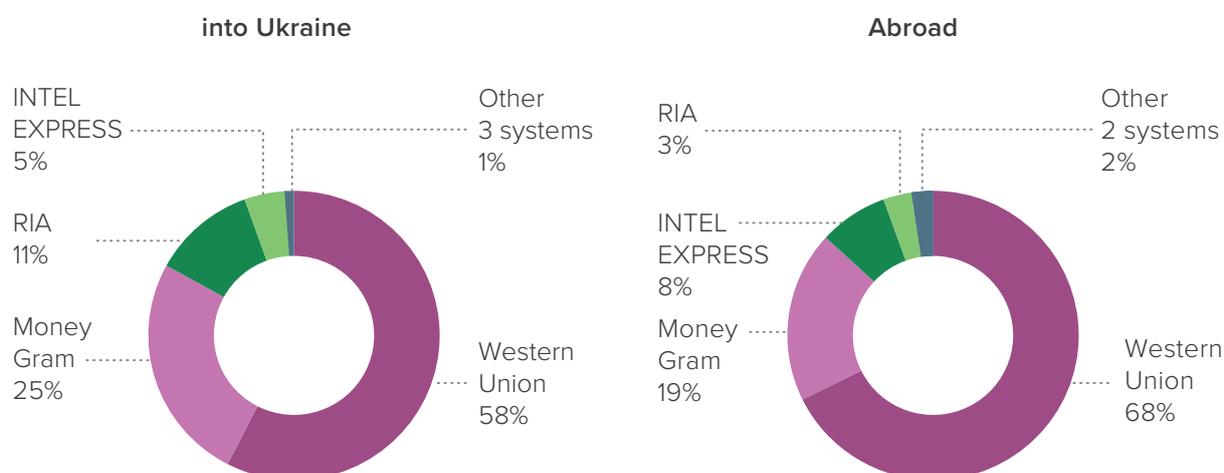
In 2021, eight money transfer systems established by nonresidents operated in Ukraine, whereof five were U.S. based, and one in each of the following countries: Georgia, the United Kingdom, and Canada.

In 2021, the following amounts were transferred via money transfer systems established by nonresidents:

- within Ukraine – UAH 81.2 million (the equivalent of USD 3.0 million)
- into Ukraine – the equivalent of USD 2,651.7 million
- abroad – the equivalent of USD 618.2 million.

In 2021, Western Union accounted for the greatest share of transfers both to Ukraine and abroad (58% of cross-border transfers to Ukraine and 68% to foreign destinations).

Distribution of cross-border transfers via nonresident money transfer systems (by transfer amount)



Ukraine remains a net recipient of cross-border transfers. In 2021, the amounts received in Ukraine through international money transfer systems were almost five times as much as those sent abroad.

In 2021, the largest transfers to Ukraine came from the USA (19%), Israel (12%), and Italy (11%). Last year, the largest transfers from Ukraine were to Russia (29%), Georgia (16%), and Turkey (6%).

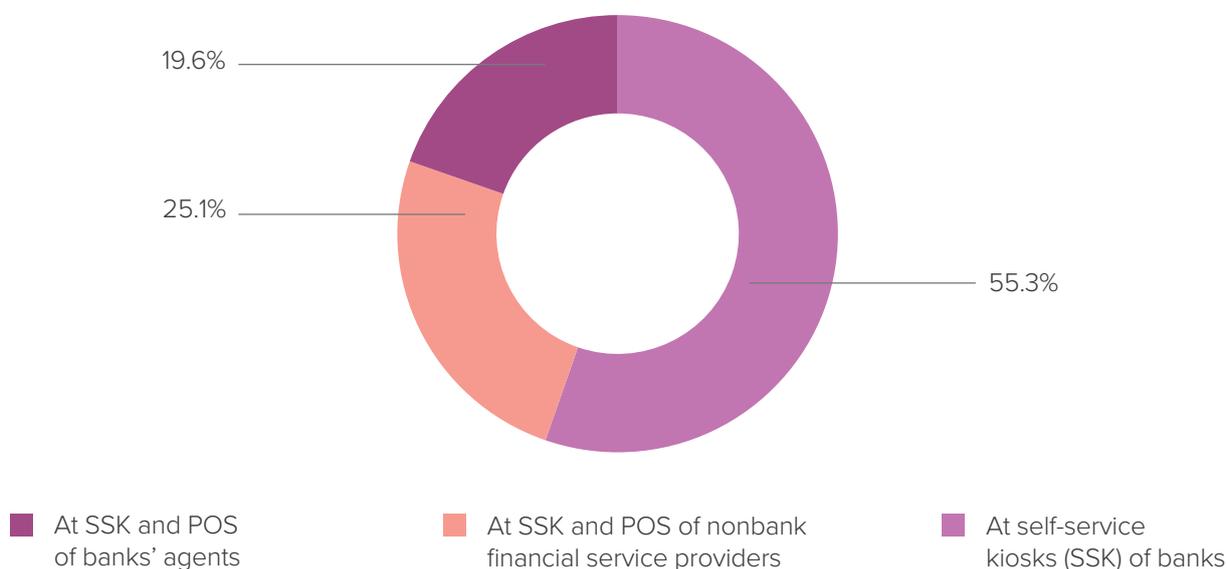
Accepting Cash Payments for Further Transfer

In 2021, cash payments were accepted for further transfer:

- at self-service kiosks (SSK): by 13 nonbank institutions, 11 agent banks, and 26 banks at their own self-service kiosks
- at payment terminals: one nonbank institution (Ukrposhta JSC)
- at financial service points: by 28 nonbank institutions as part of money transfer systems and 34 agent banks.

In 2021, the amount of cash payments accepted for further transfer was UAH 797.62 billion, making a 19.8% increase yoy.

Distribution of accepted cash payments for further transfer in 2021 by value



The major share of cash payments was accepted by SSKs of banks (UAH 441.2 billion, or 55.3%).

E-money Transactions

In 2021, the following banks issued e-money and conducted e-money transactions:

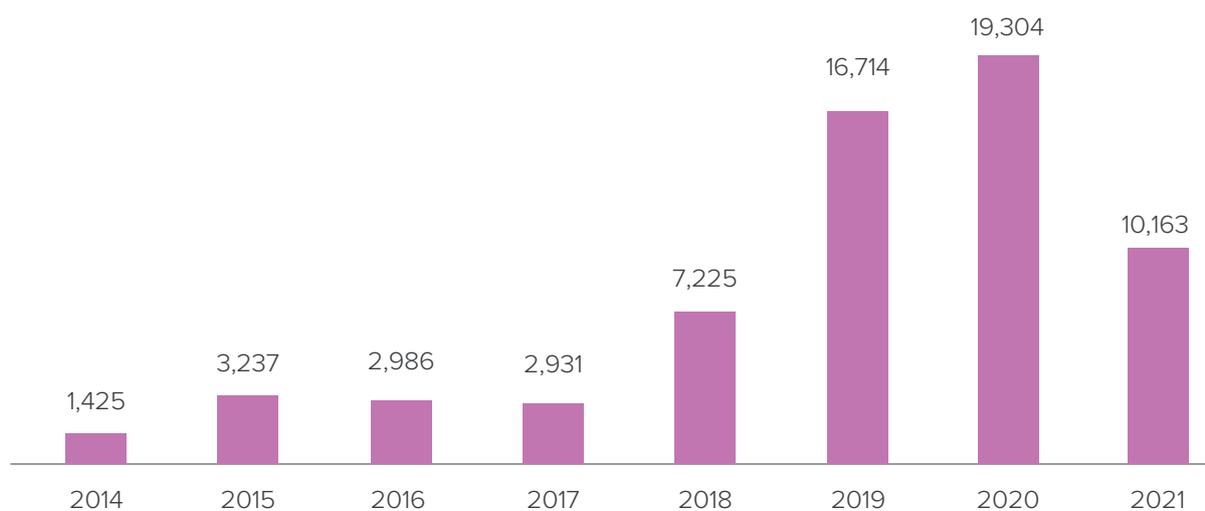
- Maksi (TASCOMBANK JSC)
- GlobalMoney (BANK ALLIANCE JSC)
- ELECTRUM (UKRGASBANK JSB)
- ALFA-MONEY (ALFA BANK JSC)
- MasterCard (BANK VOSTOK PJSC, ALFA BANK PJSC, TASCOMBANK JSC, OSCHADBANK JSC)

- Visa (OSCHADBANK JSC, INDUSTRIALBANK JSCB, CONCORD JSCB, MEGABANK JSC, RAIFFEISEN BANK AVAL JSC)
- PROSTIR (UKRGASBANK JSB, BANK VOSTOK PJSC).

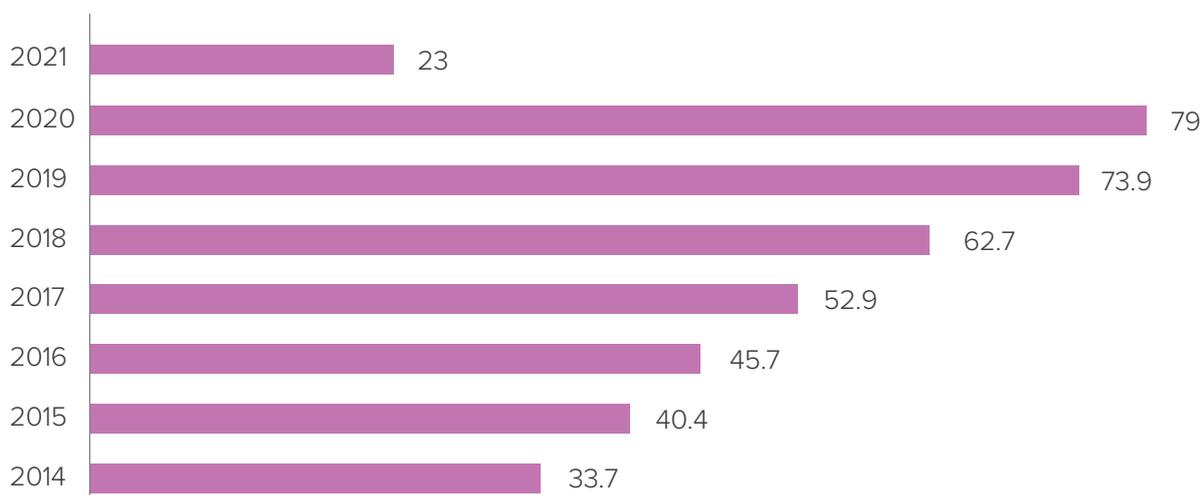
In 2021 compared with 2020, issuing banks decreased:

- volumes of transactions with e-money by almost a half (by UAH 9,141 million), to 10,163 from UAH 19,304 million
- the number of e-wallets – 3.5 times (by 56 million), to 23 million from 79 million
- e-money – 1.6 times (by UAH 22.7 million), to UAH 37.3 million from UAH 60 million.

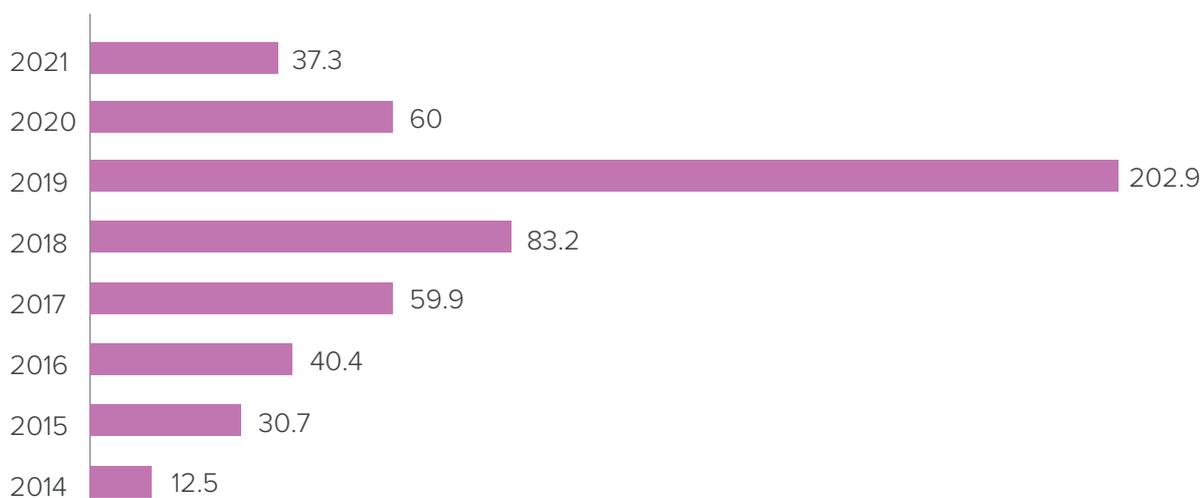
Transactions (UAH millions)



Total number of e-wallets (millions)



E-money issued (UAH millions)



The volume of transactions with e-money decreased due to the fact that in 2021 the majority of market participants exited the market. This was

caused by setting the requirements for the issuers to properly inspect e-money users in the context of their compliance with the Law of Ukraine

On Prevention and Counteraction to Legalization (Laundering) of Proceeds from Crime, Terrorism Financing, and Financing the Proliferation of Weapons of Mass Destruction and the NBU regulations adopted in compliance with the requirements of said Law.

Opening Customer Accounts by Banks

As of 1 January 2022, banks of Ukraine provided services to 72.2 million customers, including:

- 2.9 million business entities (4%), whereof 1.8 million being sole proprietors
- 69.3 million individuals (96%)
- 0.015 million individuals being private notaries, lawyers, and forensic experts (0.02%)
- 0.005 million clients being state-funded institution (0.01%).

Banks opened 142 million accounts for their customers.

A total of 5.6 million accounts were opened for business entities. Almost all of said accounts (5.6 million) were the current accounts, whereas deposit accounts accounted for a small part (0.07 million). Over 2.3 million business entities' accounts (79%) were serviced remotely, which allowed bank customers to track account

balances and conduct transactions under their accounts in real time.

Banks opened 136.3 million accounts for individuals, whereof 119.9 million (88%) being current accounts and 16.4 million (12%) – deposit accounts. More than 44.2 million individuals (64%) were serviced remotely.

In general, the following trends were observed in 2021:

- The number of banks' clients increased by 13%: the number of business entities grew by 6%, and that of individuals increased by 13%. At the same time, the number of state-funded institutions decreased by 5%.
- The number of opened accounts increased by 14%: to business entities – by 7%, to individuals – by 14%.
- The number of escrow accounts increased by 82%: said accounts opened to business entities increased by 143% (as of 1 January 2022, 1,058 accounts were opened), and those for individuals grew by 2% (336 accounts).
- The number of clients receiving remote services increased: said services for business entities grew by 3%, and those for individuals increased by 6%.
- The number of inactive accounts of banks' clients decreased by 11%.

Number of banks' customers and accounts as of 1 January 2022



Banks
71



Customers
72.2 million



Accounts
142 million



Business entities **2.9 million**
(including **1.8 million** - sole proprietors)



Individuals
69.3 million

Adoption of the Law of Ukraine On Payment Services, Renewal of Ukraine's Payments Landscape

In 2021, the NBU's efforts, which were focused on the implementation of PSD2 and renewing the legal regulation of the payment services market, proved successful thanks to the adoption by the Verkhovna Rada of Ukraine of Law of Ukraine No. 1591-IX, dated 30 June 2021, *On Payment Services*. The Law will help transform the payment market and increase the number of its participants. The main provisions of the Law take effect on 1 August 2022.

The Law of Ukraine *On Payment Services* defines nine types of payment service providers. In addition to banks, they include payment institutions, postal operators, e-money institutions, branches of foreign payment institutions, central government bodies, and local governments.

The Law of Ukraine *On Payment Services* also allows those nonbank financial institutions that have obtained the relevant authorization from the regulator to open payment accounts for the following services: crediting cash to customers' accounts, cash withdrawals, and the execution of payment transactions with customers' own funds.

In addition, new types of participants will enter the market – account information and payment initiation service providers. Approaches to payment instruments and transactions will be revised, and the number of payment services will be increased to nine (of which seven are financial payment services and two, nonfinancial).

The Law of Ukraine *On Payment Services* provides the basis for a comprehensive renewal of the Ukrainian payments landscape, and the integration of Ukrainian payment market with the European one, while creating a powerful incentive for the development of the Fintech market.

In particular, this will become possible thanks to the implementation of Open Banking in Ukraine, and the creation of a regulatory sandbox at the NBU, opening up many new opportunities

for financial services users. The Law of Ukraine *On Payment Services* provides for the establishment of Open Banking in 2025.

Furthermore, the Law of Ukraine *On Payment Services* grants the central bank the right to issue the NBU's digital money. Therefore, we are currently focused on finding an effective way to use the e-hryvnia (aka use cases).

The major benefit of the new payment market regulation is that Fintech companies will be able to build mutually beneficial cooperation with banks and receive more opportunities for business development. This will give rise to new payment startups and encourage healthy competition on the payment market.

NBU System of Electronic Payments

In 2021, the System of Electronic Payments of the National Bank of Ukraine (hereinafter referred to as the SEP) operated efficiently and reliably, ensuring high levels of security for interbank transfers in the domestic currency.

In 2021, 446 million of initial payments worth a total of UAH 57 trillion were made through the SEP (compared to 385 initial payments worth a total of nearly UAH 45 trillion in 2020).

The number of transactions handled by the SEP grew by 16% in comparison with 2020, and their value grew by 27%.

On an average day in 2021, the SEP processed approximately 1.8 million initial payments worth a total of UAH 229 billion.

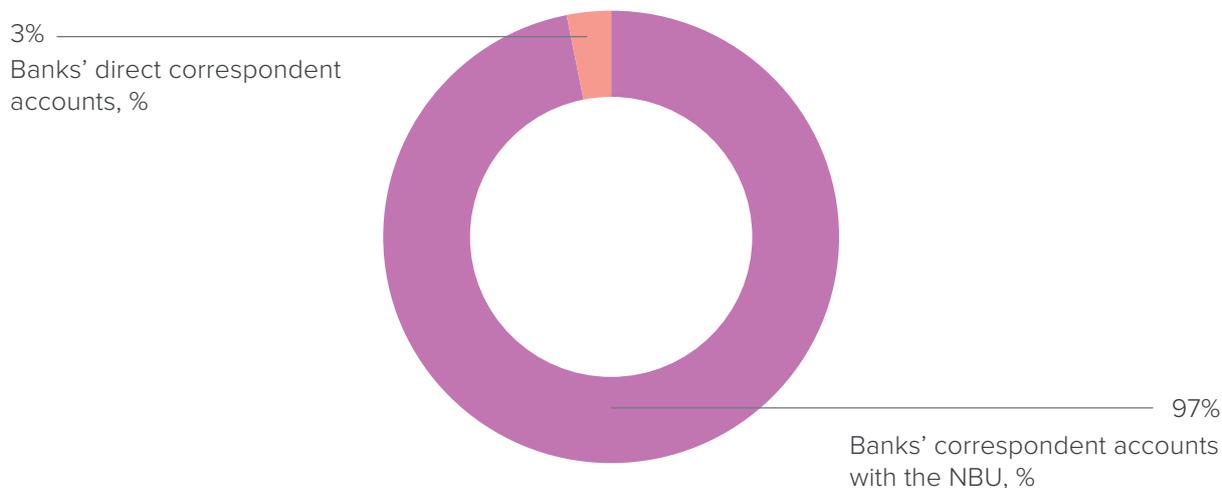
The average ratio of funds turnover was 276% (the ratio of cash circulation over the year grew by 58 percentage points).

In the reporting year, this state-owned banking payment system handled 97% of the hryvnia-denominated interbank transfers made within Ukraine.

SEP. Facts and Figures 2021

Corporate participants in the system as of 1 January 2022	71 banks of Ukraine the State Treasury Service of Ukraine NBU
Number of transactions	446 million payments
Value of transactions	UAH 57,270 billion
Daily average transaction volume	1.8 million payments UAH 229 billion
Batch payments	442 million payments UAH 26,661 billion
Real-time payments	4 million payments UAH 30,609 billion
Average daily balances on SEP participants' accounts	UAH 83 billion
Daily average ratio of cash circulation on the accounts of system participants	2.76
Structure of payments (by number)	Under UAH 1,000 – 48% between UAH 1,000 and UAH 100,000 – 48% over UAH 100,000 – 4%
Structure of payments (by value)	Under UAH 1,000 – less than 1% between UAH 1,000 and UAH 100,000 – 5% over UAH 100,000 – 94%

Interbank hryvnia transfers through direct correspondent accounts and through the SEP





Daily average ratio of cash circulation in the SEP



The NBU continues to modernize the SEP by introducing the ISO 20022 international standard and switching the system to a 24/7 mode, ensuring there is an immediate transition from one business day to the next business day without the suspension of interbank payment transaction processing by the SEP.

JSC. As of the end of 2021, the PROSTIR NPS had 56 participants.

As of the end of 2021, 37 participants were providing issuing and/or acquiring services in the PROSTIR NPS

PROSTIR National Payment System

In 2021, the NBU focused its efforts on increasing the technological capabilities of the PROSTIR National Payment System (hereinafter referred to as the PROSTIR NPS), creating a sufficient level of payment infrastructure for the acceptance of PROSTIR cards, and implementing new services of the system, as set out in the Strategy of Ukrainian Financial Sector Development until 2025.²⁷

PROSTIR Payment Infrastructure

In 2021, the PROSTIR NPS card acceptance infrastructure increased in size. Payments using PROSTIR cards may be performed in 417,000 retail POS terminals in Ukraine, accounting for 98% of the total number of POS terminals in Ukraine. Also 95% of all electronic commerce merchants accept PROSTIR cards for payments.

As of the end of 2021, 16,300 ATMs serviced PROSTIR NPS payment cards (88% of all ATMs in Ukraine).

PROSTIR NPS Participants

In 2021, two banks joined the PROSTIR NPS: BANK 3/4 JSC and UKRAINIAN CAPITAL BANK

In 2021, the NBU expanded the possibilities for card-to-card transfers (P2P transfers). This set of functions was carried out by payment service providers (Portmone, Easy pay, Ipay, and Platon),

²⁷ Strategic direction V goal 1 paragraph 5.1.4 of the Roadmap of Ukraine's Financial Sector Development Strategy through 2025.

PROSTIR NPS participants – the owners of the P2P service (Oschadbank JSC, Raiffeisen Bank Aval JSC, ALFA-BANK JSC, Ukrposhta JSC, FORWARD BANK JSC, JSCB CONCORD JSC), and processing centers.

Furthermore, in 2021, the ATM cash replenishment network in the PROSTIR NPS expanded. As of the end of 2021, PROSTIR cards could be replenished through IBOX and Sistema self-service payment devices, the networks of the partner bank of the MONEGO money transfer system, and the POS-terminals of UKRPOSHTA JSC.

In 2021, the NBU expanded the options for issuing PROSTIR cards for the following banks that use the services of processing centers: FUIB JSC, PROCARD LLC, and TAS LINK LLC. In particular, the processing centers of FUIB JSC and PROCARD LLC issued PROSTIR cards with magnetic stripes, while a processing center of TAS LINK LLC issued dual interface chip cards (contactless).

PROSTIR Payment Cards and Transactions

As of the end of 2021, the total number of the PROSTIR payment cards issued by the participating banks was 581,000 units, including 61% of active payment cards (or 351,000 units.).

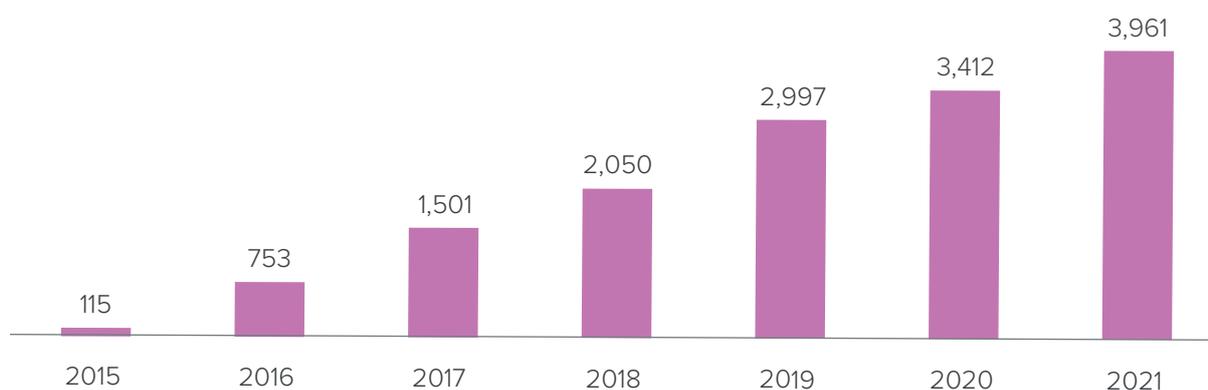
In 2021, the total value of transactions with PROSTIR cards was UAH 29.9 billion, up by UAH 3.9 billion (15%) from 2020. The number of transactions with PROSTIR cards also grew by 1.2 million (11%), and as of the end of 2021 amounted to 12.2 million.

The volume of cashless transactions using the PROSTIR cards in 2021 almost doubled compared with 2020. Simultaneously, as of the end of 2021, the share of cashless transactions of the total value of PROSTIR card transactions was 26%, compared to 16% at the end of 2020 (the share of cashless transactions increased by 10 pp over a year). Also, as of the end of 2021, the share of cashless settlements of the total value of PROSTIR cards transactions grew to 54%, up by 9 pp over the previous year. Recent years have seen a sharp rise in cashless settlements, which reflects a shift in behavior of PROSTIR card holders and the more frequent use of cards as a means of payment.

In 2021, the total volume of transactions with electronic money issued by banks participating in the system was UAH 2.4 billion, down by UAH 1.3 billion on the previous year. The volume of electronic money transactions fell due to a new law that requires a mandatory identification/verification of the owners of digital wallets. This resulted in a waning of interest of payment market participants in the development of such products.

In 2021, 68% of the total number of PROSTIR card transactions were performed within the networks of the banks that issued the cards (compared to 69% in 2020). The number of the interbank transactions processed by the Central Router of the PROSTIR NPS in 2021 was 3,961,000, up by 16% on the previous year. These transactions were worth a total of UAH 1.852 billion, a 3% increase on 2020. These volumes and numbers of transactions contributed to the expansion of the PROSTIR card network, and as a result, the more frequent use of these cards for daily payments by the card holders.

Interbank transactions by number, thousands



Also, at the end of 2021, the PROSTIR NPS, along with the banks that had started to issue PROSTIR cards for new products, launched a joint initiative to promote among card holders the conducting of cashless settlements using the cards of the national payment system.

Secure Online PROSTIR Card Settlements

One of the priorities in the PROSTIR NPS development is to enhance the security of online transactions. In 2021, the NBU completed the technical implementation of the Directory Server system at the level of the PROSTIR NPS Central Router, which supports the 3-D Secure 2.2.0 technology (EMV 3-D Secure), had it certified by the international organization EMVCo, and developed technical documentation to connect the PROSTIR NPS participants and processing centers.

QR-Codes for Credit Transfers

In 2021, the regulator reviewed the Rules for generating and using QR codes for credit transfers, and approved a new format of QR-code.

The new format of the QR code (the 002 format) introduces a code for launching the application. It allows the bank's client, when scanning the QR code, to automatically open the payment application of a bank that has integrated the QR-code, and to make the payment. In addition, the coding of symbols and data has been optimized to reduce the size of the QR code.

In 2021, the following banks successfully updated their payments apps in line with the revised rules: ALFA-BANK JSC, BANK GRANT JSC, UKRGASBANK JSB, ASVIO BANK JSC, CB PrivatBank JSC, Monobank, UNIVERSAL BANK JSC. Now all of their customers can make payments using QR codes.

The NBU informed the public about the options and benefits of using QR codes when making payments. The information is available in NBU's Telegram channel under #NBU_about_QR codes.

Today the NBU continues to cooperate with banks and state authorities on promoting the new version of the QR code and integrating the QR code into payment documents.

Additionally, the NBU is working on a number of issues to improve and promote payments using QR codes. They include, in particular, finding a single mechanism for generating the QR code and determining the following:

- Who should the code generator be: the service provider/seller or the servicing bank?
- Who should be responsible for the accuracy of the information in the QR code?
- How can a mechanism to protect the QR code be provided, and how can it be implemented?

In addition, a factor that currently deters people from using the QR code is the lack of (instant) payment confirmation compared to other payment instruments (since the QR code is for credit transfers). That is why the NBU is considering the possibility for the use of QR codes in the system of instant payments, and sees great potential for this.

Regulation of Cash Circulation

In 2021, we contributed to creating a partially delegated model of cash circulation with its further transformation into a delegated model to provide the market with cash of proper quality, required denominations and amounts by expanding the network of locations of authorized banks.

In 2021, the NBU continued to transfer its cash stocks into the custody of authorized banks. They were transferred under respective agreements with Oschadbank JSC, CB PrivatBank JSC, Raiffeisen Bank Aval JSC, and FUIB JSC.

For these banks, respective limits were set for cash custody volumes in all oblasts of Ukraine (including the territories of Donetsk and Luhansk oblasts controlled by the Ukrainian government), the city of Kyiv, and Kyiv oblast. As of the end of 2021, the number of authorized bank locations was 75 units. It is two units more than as of the end of 2020 (73 locations).

Cash was provided through regional cash circulation units of the Cash Circulation Department (hereinafter referred to as cash circulation units), the Central Vault, authorized banks, and banks of Ukraine.

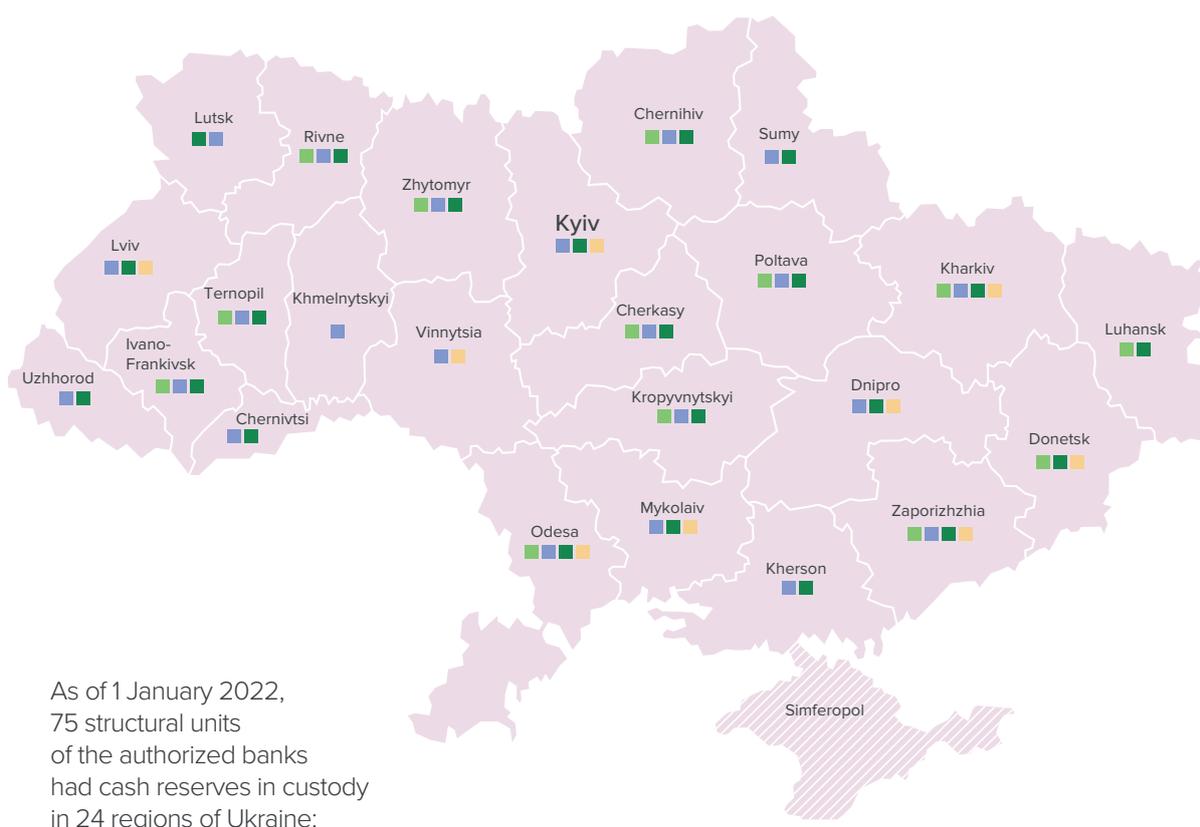
In 2021, banknotes and coins worth UAH 118.8 billion were transferred from the NBU cash stocks by regional cash circulation units and the Central Vault to the authorized banks and banks of Ukraine (in 2020, UAH 255.9 billion, respectively). In 2021, the authorized banks

and Ukrainian banks transferred cash to the NBU in the amount of UAH 50 billion, including unfit cash worth UAH 35.4 billion (in 2020, UAH 120.5 billion and UAH 29.6 billion, respectively).

During 2021, banks and authorized banks intensified their efforts to meet the demand for cash in the interbank market. Therefore, the volume of cash disbursements from the NBU cash reserves decreased significantly.

For reference: In 2021, cash circulation units and the Central Vault transferred cash worth UAH 103.3 billion to the NBU's cash stock in custody with the authorized banks (in 2020, UAH 195.7 billion). The authorized banks used the cash to replenish their cash desks. At the same time, the authorized banks transferred to the NBU UAH 17.0 billion from their cash stocks, of which nearly UAH 10 billion was unfit for circulation (in 2020, it was UAH 8.4 billion and UAH 7.9 billion, respectively).

Cash servicing in 24 regions by authorized banks (as of 1 January 2022)



- Oschadbank JSC - in 13 regions
- Raiffeisen Bank Aval JSC - in 22 regions
- CB PrivatBank JSC - in 22 regions (30 units)
- FUIB JSC* - in 9 regions (10 units)

In order to improve cash circulation, the NBU participated in the development of the NBU's functional Strategy for Developing Cash Circulation and Payment Systems for 2021–2024 approved by NBU Board Decision No. 423 dated 20 August 2021.

Based on this Strategy, the Vision for Developing the Delegated Model of Cash Circulation in Ukraine was drafted.

In 2021, to increase the efficiency of cash management and strengthen the internal control system, the following have been improved:

Regulation On the Selection Procedure and Eligibility Criteria to be Met by Banks to be Qualified as Custodians of NBU Cash Reserves approved by NBU Board Resolution No. 389 dated 28 September 2016 (as amended).

Regulation On Cash Operations in Domestic Currency in Ukraine approved by NBU Board Resolution No. 148 dated 29 December 2017 (as amended)

Instruction On Carrying Out Cash Operations by Banks of Ukraine approved by NBU Board Resolution No. 103 dated 25 September 2018 (as amended)

Regulation On Transferring Cash Reserves to Authorized Banks for Custody and Carrying Out Operations with Them approved by NBU Board Resolution No. 95 dated 17 September 2021.

Within the centralized cash handling automation system, the NBU improved the software application Transferring the NBU's Cash Reserves for Custody to Authorized Banks and Automation of Processing of Banks' Applications for Cash Disbursements and Transferring Fit and Unfit Banknotes and Coins.

Cash Collection

In 2021, the NBU continued to develop the delegated model by outsourcing cash handling to third parties (CIT companies). Cash handling by third parties is regulated by the rules set by the central bank and is subject to the NBU's supervision. As of the end of 2021, 12 legal entities obtained the right to provide banks with cash collection services. They serviced 3,593 bank offices.

Within the framework of the Policy on Cash Circulation in Ukraine, in 2021 the NBU reviewed the sets of documents from three more CIT companies applying for approvals of their performing operations on cash handling and storage. One of said CIT companies obtained the NBU's permit for cash handling and storage.

In addition, we amended the regulations, which clarified the requirements for cash collection and transportation of currency values, for legal entities to obtain a license to provide banks with collection services and approval of carrying out cash processing and storage operations, as well as for the procedure of interaction between the legal entities engaged in cash handling and storage and other legal entities.

Creating Conditions for High-Quality Cash Circulation

Despite the fact that Ukrainian citizens increasingly prefer cashless payments, cash still plays a significant role in society. Confidence in the domestic currency begins with quality cash and its easy use in circulation.

Cash is a universal means of payment that is accepted at face value throughout Ukraine, sometimes, the only one available to some vulnerable groups of population. Therefore, we continue to meet the needs of Ukraine's economy in a high-quality and protected domestic currency and supply the required number of banknotes and coins of various denominations.

We continue to implement the delegated model of cash circulation in Ukraine and work to improve the efficiency of cash circulation, taking into account the overall performance of Ukraine's financial system in the cash and payments area, in particular:

- uneven level of development of the infrastructure providing high-speed Internet coverage
- high social importance of cash in the modern society
- availability of a full cycle of money manufacturing in Ukraine.

In such conditions, a comprehensive and detailed study of all factors influencing the development of the cash market and the financial ecosystem



as a whole is extremely important for ensuring cash circulation at a high-quality level.

In order to identify areas for further improvement of cash processes in 2021, we have developed and approved the NBU's Functional Strategy for Developing Cash Circulation and Payment Systems in 2021–2024. This document is part of the new NBU's Strategy 2025 and, in terms of improving cash circulation, provides for completing the transition to a delegated model of cash circulation factoring in the proper risk management, as well as improving the efficiency of cash circulation by optimizing and automating the processes.

Further increase in the efficiency of cash circulation depends on the introduction of comprehensive automation of cash stocks management and cash distribution processes in the money market.

In order to transit to a delegated model we have developed a roadmap that is a guide for both the NBU and the commercial sector. It includes the following:

- introducing cash tariffs aimed at bringing price setting of cash transactions closer to fair value
- introducing the efficient system of control over compliance of cash cycle participants with the NBU's regulatory requirements
- meeting the needs of the economy in the necessary denominations of banknotes and coins, even in times of crisis and instability
- optimizing the procedure for supporting the NBU's cash reserves
- optimizing operations in the cash market.

All these and other measures are approved in the Vision for Developing the Delegated Model of Cash Circulation in Ukraine.

Goal 6.

Improving the Level of Financial Inclusion

Protection of the Rights of Consumers of Financial Services

In 2019, the NBU received powers to protect the rights of consumers of financial services and established a unit responsible for this – the Office for Protecting the Rights of Financial Services Consumers.

The Office for Protecting the Rights of Financial Services Consumers handles public requests, which allows it to study the difficulties that clients of banks and nonbank financial institutions encounter, and to respond to them. To eliminate systemic violations, the Office for Protecting the Rights of Financial Services Consumers sets requirements for banks and nonbank financial institutions in terms of protecting their clients' rights, monitors compliance with the laws of Ukraine on consumer rights protection, as well as the full disclosure of financial institutions of information about their services, the terms of their provision, and their costs on their websites and in advertising. The Office for Protecting the Rights of Financial Services Consumers supervises compliance by the participants of the financial services market with the requirements of the law on the protection of consumer rights in financial services and the law on advertising. The supervision is carried out via offsite and onsite inspections of financial institutions.

To ensure full disclosure of information about services, the rights and obligations of the bank and the customer, and the consequences of failing to fulfill these obligations, the NBU has set additional requirements that bank agreements fully disclose information about services, such as: requirements for bank agreements on consumer loans and deposits, and on opening and maintaining a current account. The respective requirements were approved by NBU Board Resolution No. 7 *On Approval of the Regulation on Additional Requirements for Agreements on Providing Financial Services* (as amended), dated 22 January 2021.

According to the document, banks' agreements are to include a detailed description

of the financial services, and exclude bad-faith terms. Extensive information about the services contributes to a better understanding by customers of the terms of the provision of financial services and enables them to make an informed decision on whether to conclude an agreement.

In addition, the regulation *On Supervision by the National Bank of Ukraine Over Banks' Compliance with Laws on the Protection of Consumer Rights in Financial Services*, approved by NBU Board Resolution No. 15, dated 9 February 2021 (as amended), establishes the procedure for the supervision of banks' compliance with laws on the protection of consumer rights in the financial services market.

Such supervision ensures the disclosure of full and reliable information about financial services providers to their customers, so that customers can make informed decisions, as well as fostering more responsible conduct by banks towards their customers.

In 2021, the NBU continued to regulate the activities of nonbank financial institutions. It started doing so quite recently – from 1 July 2020. In line with the *Rules for Ukrainian Nonbank Financial Institutions for Calculating the Total Cost of a Credit to a Consumer and the Real Annual Interest Rate Charged under a Consumer Loan Agreement*, which was approved by NBU Board Resolution No. 16 of 11 February 2021 (as amended), the NBU approved updated rules for calculating the key indicators of the cost of a consumer loan: the real annual interest rate and the total cost of a consumer loan.

This was done to create equal conditions for the disclosure of information by all creditors – banks and nonbank financial institutions. As a result, customers are now able to easily compare offers from banks and nonbank financial institutions and make informed decisions about whether to take out consumer loans.

The adoption of the Law of Ukraine No. 1349-IX *On Amendments to Certain Laws of Ukraine Concerning Debtor Protection*

in Settlement of Overdue Debts, dated 19 March 2021, was the most anticipated event in 2021. The adoption of the law for the first time established a clear legal framework for the operation of collection agencies and creditors when recovering past-due consumer loans, and it also defined the NBU as the regulator. The first steps towards bringing the operation of debt collection agencies in line with commonly accepted standards were to make an exhaustive list of ethical practices and create a Register of legal entities regulating past due loans for the benefit of existing and new creditors. In 2021, 62 companies were included on the register of debt collection agencies.

To implement the new law, the NBU developed a number of regulations: On 11 June 2021, the NBU approved

- NBU Board Resolution No. 47 *On Amendments to the Regulation on Information Support for the Clients by Banks as Regards Banking and Financial Services*
- NBU Board Resolution No. 48 *On Approval of Amendments to the Rules for Calculating by Banks of Ukraine the Total Cost of Credits to Consumers and the Real Annual Interest Rate Charged under a Consumer Loan Agreement*
- NBU Board Resolution No. 49 *On Approval of Amendments to the Rules for Calculating by Nonbank Financial Institutions of Ukraine the Total Cost of a Credit to a Consumer and the Real Annual Interest Rate Charged under a Consumer Loan Agreement*

NBU Board Resolution No. 53 *On Approval of Amendments to the Regulation On Additional Requirements for Agreements on Providing Financial Services*, dated 17 June 2021, which approved new requirements for bank agreements. The precise definition of a number of important terms in agreements excludes situations that can be interpreted in favor of one party or the other, and makes it easier for a customer to understand the terms of the agreement.

NBU Board Resolution No. 70, dated 5 July 2021, approved the application of corrective actions to banks for violating laws on the protection of the rights of consumers of financial services, in particular requirements on ethical conduct when regulating past due loans.

On 9 July 2021, the NBU Board approved Resolution No. 76 *On Approval of the Regulation On Supervision by the National Bank of Ukraine Over Compliance with Requirements on Interaction with Financial Services Consumers When Regulating Past Due Loans* (Ethical Conduct Requirements), and Resolution No. 79 *On Approval of the Regulation on Requirements for Creditors, New Creditors, Debt Collection Agencies and Their Past Due Resolution Actions*.

These two documents are a logical extension of the law on “debt collection agencies.” The first document aims ensure the responsible conduct of creditors, new creditors, and debt collection agencies towards all types of consumers, establishing the supervision procedure, while the second document sets out clear requirements for actions in past due resolution.

In addition to regulating debt collection agencies’ activities, the NBU was working on other documents in 2021. The Regulation *On Supervision by the National Bank of Ukraine Over Compliance by Financial Services Market Participants with Laws on Protecting the Rights of Consumers of Financial Services* approved by NBU Board Resolution No. 52, dated 16 June 2021, establishes the procedure for the supervision of the compliance by nonbank financial services market participants with laws on the protection of the rights of consumers of financial services and with the requirements of laws on advertising.

Their goal is to promote responsible business conduct by nonbank financial services market participants, and to strengthen public trust in the financial sector.

Additionally, the NBU approved requirements for nonbank financial institutions to disclose all information about their consumer lending services and the full cost of credit for consumers. These requirements are specified in NBU Board Resolution No. 100, dated 5 October 2021, *On Approval of the Regulation on Informing Consumers about Consumer Lending Services by Financial Institutions*. The requirements apply to the websites of financial institutions, the dissemination of information in advertising, informing clients over the period of the use of the loan, and the specifics of disclosing information about microloans.

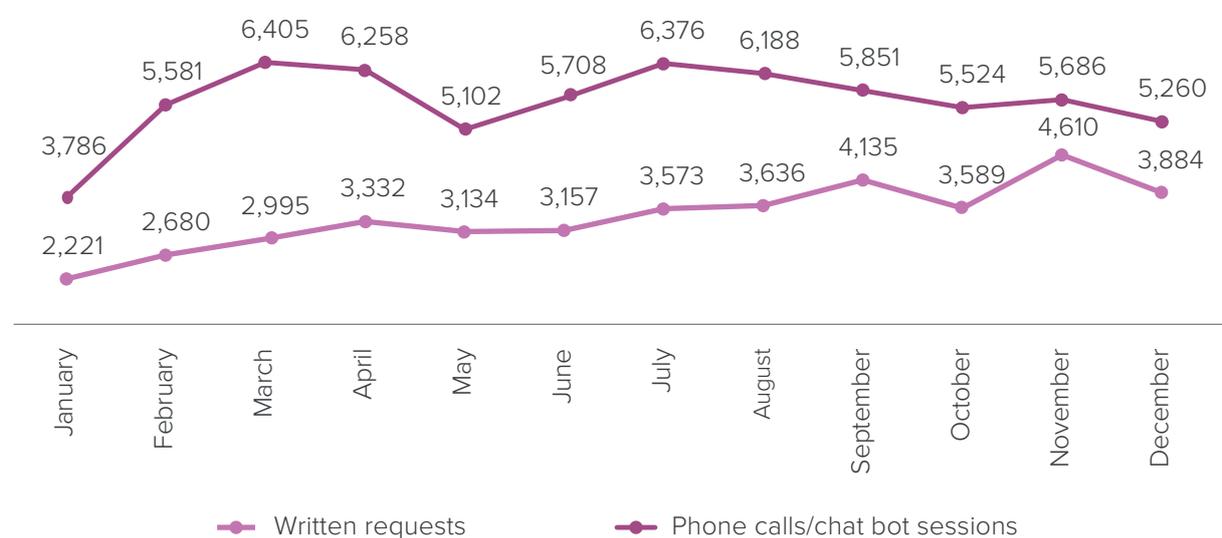
Another problem – consumers’ confusion over their obligations under loan agreements

with financial institutions – led to the development of additional requirements for loan agreements with nonbank financial institutions (consumer and financial credit). To make agreements more informative and understandable, the NBU Board approved in its Resolution No. 113, dated 3 November 2021, the regulation *On Additional Requirements for Loan Agreements with Nonbank Financial Institutions* (consumer and financial credit), which came into effect on 5 November 2021.

It became easier for customers to contact the NBU in 2021. The NBU is introducing new approaches and communication channels to provide effective and instant feedback to the public: Viber and Telegram chat bots, and web chats on the NBU's official website.

Today, the public can call, send a letter by post or email to the NBU, fill an online form on the NBU's official website, or interact through a chat bot to easily find the information they require. The chat bot contains a set of question-answer pairs, thus optimizing the operation of the contact center. If the inquiry is complex and cannot be handled by the chat bot, the conversation is redirected to an employee of the Office for Protecting the Rights of Financial Services Consumers.

The abovementioned communication channels together allowed the NBU to process over 100,000 requests in 2021: more than 40,000 written requests, over 63,000 calls to contact centers, and almost 4,000 chat bot sessions.



During 2021, the Office for Protecting the Rights of Financial Services Consumers received and handled more than 40,000 written requests from the public, including over 250 requests concerning access to public information. Most written requests (75.7%) were related to nonbank financial institutions. 19.6% of the written requests were related to banks' activities. The other 4.7% of the inquiries were connected with liquidated banks and other issues.

In quantitative terms, the NBU received over 8,000 requests concerning operating banks and about 400 requests concerning banks under liquidation.

There were over 25,500 requests on the operation of microfinancial companies, making them leaders among the nonbank financial institutions in the number of requests.

The NBU received more than 4,200 requests

regarding the operation of insurance companies, about 100 requests on the activities of credit unions, and 100 requests concerning other nonbank financial institutions.

Most written inquiries in 2021, totaling over 36,300 requests, were made by individuals. About 600 requests were made by legal entities. Furthermore, the NBU received over 120 requests from Members of Parliament.

The most frequently asked questions about banks' activities in 2021 were related to legal relationships within loan agreements (more than 3,200 requests), electronic means of payment and settlements (over 2,100 requests), the service quality in a bank (over 500 requests), and relationship within deposit agreements (more than 250 requests). About 1,700 requests were related to other issues.

The most frequently asked questions about the operation of nonbank financial institutions were related to legal settlement of past due loans (about 17,000 requests), legal relationships under agreements with microfinancial companies (around 9,000 requests), the legal settlement of compulsory types of insurance (over 3,200 requests), the legal settlement of voluntary types of insurance (over 500 requests), and other issues (over 1,100 requests).

The NBU detected violations in relation to over 43% of customers' requests, and provided clarifications for half of them. Some 1% of the requests fell outside the competence of the Office for Protecting the Rights of Financial Services Consumers.

In 2021, the NBU's contact center received over 63,500 calls, with 8,500 of the calls being related to operating banks (over 8,500 calls), nonbank financial institutions (over 15,500 calls), banks under liquidation (about 2,000 calls), and other issues (almost 37,500 calls). Also, the contact center answered calls regarding the legal settlement of past due loans (more than 11,500), the legal settlement of loans from microfinancial companies (over 10,000), money circulation (banknotes and coins, over 5,500), legal relationships within loan agreements with banks (over 5,000), the NBU's operations (over 3,000), electronic means of payment and settlement (around 3,000), foreign exchange transactions (over 2,000), and other issues (around 22,000).

In addition, the NBU held almost 4,000 chat sessions, with over 1,800 messages being received through Viber, over 1,500 – through Telegram, and about 500 through web chats.

The typical consumer rights violations detected in 2021 included:

- demands for the payment of another person's debt, calls and messages to individuals who are not parties to the loan agreement
- unethical collection practices, sharing photos of debtors, illegal debt recovery methods when interacting with a debtor
- unlawful accrual of interest and fees, imposition of fines and penalties under loan agreements, penalties and fines during the period of quarantine, and including penalties and fines within interest payments so as to accrue them during the quarantine
- issues concerning the restructuring of consumer loans in foreign currencies (in line with Law of Ukraine No. 1381-IX, dated 13 April 2021, On Amendments to Certain Laws of Ukraine On Consumer Loans In Foreign Currencies)
- the accrual of interest, and the imposition of fines and penalties on loans to servicemen and servicewomen, reservists, and individuals subject to military service
- violation of laws when informing customers about changes in tariffs for servicing electronic means of payment
- refusal to exchange coins withdrawn from circulation
- violation of the rights of internally displaced people
- violation of laws on the arrest of funds on customers' accounts
- hard-selling financial services
- payment card scams
- agreement terms that violate laws in effect
- violations of the laws on advertising of financial services
- violations of the terms for making decisions on paying insurance indemnities, etc.

NBU BankID System

Instruments for remote identification and verification are becoming more popular among the Ukrainian public.

The state system of remote identification, NBU BankID, provides retail bank customers with access to a vast range of digital services (state administrative, banking, financial, etc.) and a lot of options for the system participants as for identifying subscribers (banks) and for service providers.

In particular, during 2021 the number of subscribers joining the NBU BankID System increased. The remote access expanded and intensified the system use.

In 2021, 13 banks connected to the NBU BankID System as identifying subscribers and 54 new subscribers as services providers. As of the end of 2021, the NBU BankID System participants included:



- 39 identifying subscribers (Ukrainian banks)
- 92 subscribed service providers including eight banks providing online services by remote customer identification.

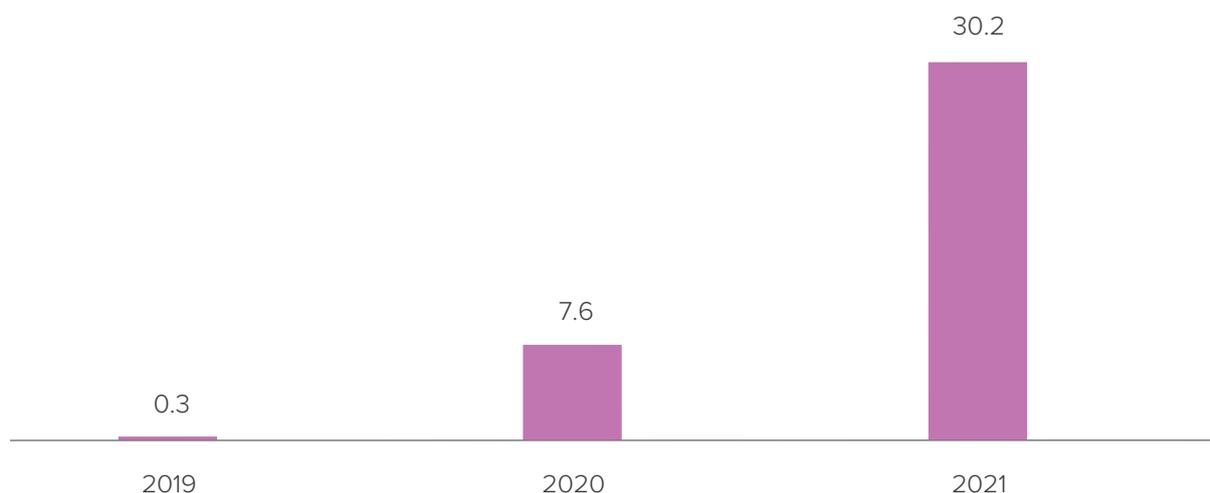
Also, private service providers have shown increasing interest in the NBU BankID System and the list of remote BankID services in different areas is expanding. If previously mostly microfinancial companies established connection to the System, today more and more requests are filed by insurance companies, pension funds, and mobile operators. At the same time, the list of service areas is constantly growing. By the end of 2021, dozens of institutions are in the process of integrating and connecting to the System.

Already over 99.6% people holding accounts with Ukrainian banks can receive remote services through the NBU BankID System. In 2021, owing to fruitful cooperation of the NBU with the Ministry of Digital Transformation of Ukraine, bank customers gained quick access to the Diia mobile app, including to services on vaccination certificates, the ePidtrymka state support program etc.

Last year the NBU BankID System executed over 30 million successful electronic identifications, four-times more than in 2020 (7.6 million), and a hundred times more than in 2019 (300,000).

By the end of the year, the NBU BankID System transmitted 110 successful user identifications per minute.

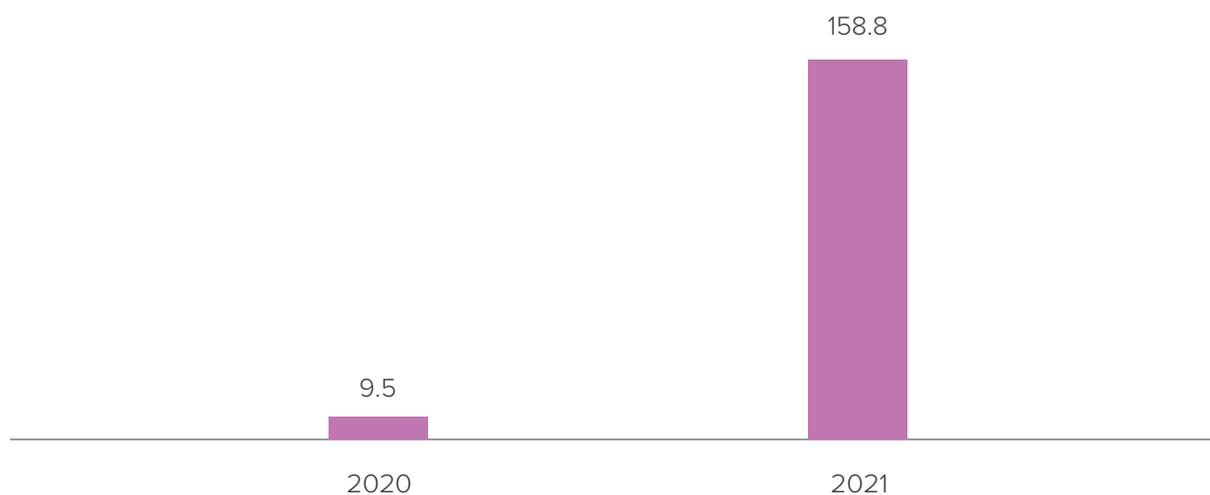
Successful identifications per year, millions



For their part, identifying subscriber banks generated additional income from the commercial use of the system. In 2021, banks' income was

over UAH 158.8 million for successful electronic confirmations of remote user identification (the commercial model was launched in July 2020).

Identifying subscriber income, UAH millions



Major changes in 2021 on the account of the NBU BankID System are as follows:

- advancing security of the System for users due to successful implementation of multifactor authentication technology by identifying subscribers
- introducing a new Public Offer for entering into the NBU BankID System Accession Agreement that streamlines the accession procedure and further operation of subscribers in the System
- amending the Cooperation Specification with consideration of subscriber needs and advancing requirements to data quality transmitted in the system.

Boosting the Public's Financial Literacy

In the year under review, the USAID Financial Sector Transformation Project, run jointly with the NBU, carried out research on Financial Literacy, Financial Inclusion and Financial Well-being in Ukraine in 2021. This was the second such survey of Ukrainians' financial awareness carried out with the use of the OECD/International Network on Financial Education methodology. According to its findings, the financial literacy score of the public in Ukraine over the past three years has climbed to 12.3, versus 11.6 in 2018.

There was an improvement in all components of the score, including financial knowledge, financial behavior, and financial attitude. At the same time, there is still great potential for growth. The indicator in the year under review is a mere 58% of the maximum possible score of 21, and is lower than the minimum OECD-recommended target score of 14.

To develop a unified strategic approach to gradually increasing the public's level of financial literacy, the NBU in the reporting year began work on creating a National Strategy for Financial Literacy Development until 2025 (hereinafter – the Financial Literacy Strategy). The document was prepared jointly with the Ministry of Education and Science of Ukraine, the Ministry of Youth and Sports of Ukraine, the Ministry of Social Policy of Ukraine, the Ministry of Economy of Ukraine, the Ministry of Infrastructure of Ukraine, the Ministry of Digital Transformation of Ukraine, the National Securities and Stock Market Commission, and the Deposit Guarantee Fund, as well as financial market participants,

the academic community, state administrations in the oblasts, and financial experts.

At the same time, while preparing the Financial Literacy Strategy, we focused on improving remote formats for working with the public, developing new channels of communication, and expanding the scale of communications campaigns in the oblasts of Ukraine.

Promoting knowledge about financial literacy in the oblasts of Ukraine through new communication channels became possible by: posting information on billboards and city light stands in 13 oblast centers, distributing educational materials in free legal advice centers in 23 oblasts of Ukraine, displaying information posters in 1,100 COOP stores in four oblasts of Ukraine, broadcasting educational videos on 540 monitors in local trains, and placing materials in local mass media.

Thanks to the launch of its virtual tour, the Money Museum significantly expanded its activities in the oblasts of Ukraine. Virtual tours were attended by schoolchildren and students from 20 oblasts of Ukraine.

In addition, seven communications campaigns were held during the year under review; two websites on financial literacy were created, which are to launch in the coming year; remote interaction with the public was improved; and large-scale events were held to mark the 25th anniversary of monetary reform.

For that particular milestone, the NBU prepared a number of educational activities, including: the #HryvniaAnatomy communications campaign, in which NBU experts described in detail the security elements of cash hryvnias; the creation of a separate tutorial on the hryvnia, which was shared with a 14,800 schools; the Open-Air Hryvnia Museum exhibition; and the #Cashless communications campaign, which popularized noncash payments.

While carrying out its activities to boost financial literacy, the NBU was able to reach a wider audience in its communications campaigns, unite the efforts of all financial market participants in coordinating activities to promote financial knowledge, and improve new formats of public relations.



30 Years of the NBU Communications Campaign

The NBU's history began on 20 March 1991. On that day, the Ukrainian branch of the USSR State Bank became the National Bank of Ukraine, with the status of a central bank of the state, and with note-issuing powers. On the NBU's 30th anniversary, an image-enhancing campaign was held to mark that landmark event.

As part of the celebrations of the NBU's anniversary, three thematic webinars were held: The NBU – 30 Years of Development: What We Were, What Has Changed, and What Future We Are Building; How Did the National Bank of Ukraine Come into Existence, and When?; and Evolution of the NBU's Monetary Policy over the Years of Independence. Two animated videos were created for schoolchildren and students to tell them about the regulator's main functions and the history of the national currency, the hryvnia. For adults, a video on how Ukraine's central bank was created and developed was made.

The Money Museum's social media platform shared a number of themed publications on major milestones in the NBU's history with the hashtag #30yearsNBU, and conducted an online quiz.

Global Money Week

As part of Global Money Week (15-28 March), the NBU conducted over 1,550 activities and 40 online events on the theme of the "Take Care of Yourself, Take Care of Your Money" international campaign.

The following events were held as part of the campaign: a nationwide contest of schoolchildren's videos "Hryvnia, Camera, Action!"; two flash mobs on social media (Dance Like the Money Man!, How We Celebrate Global Money Week 2021); three competitions for educational institutions (Top 10 Most Active Schools during GMW 2021, Top 5 Financial Literacy School Coaches, Top 10 Most Active Higher Education Institutions during GMW 2021); 10 interactive online classes for primary school students; five video premieres (GMW 2021 Grand Opening in Ukraine, Young Ukrainians Welcoming GMW 2021 Participants from Other Countries, Our Hryvnia, What Does the National Bank of Ukraine Do?, Top 5 Exhibits of the NBU's Money Museum); six Kahoot parties, six quizzes

on the Money Museum's Instagram page; and seven webinars for students.

More than 40,000 school and university students, 291 institutions (120 secondary schools, one preschool institution, one art college, 68 institutions of higher education, 55 vocational colleges of pre-higher education, and eight vocational education institutions) joined in the communications campaign.

#KnowYourRights Communications Campaign

In March 2021, the NBU together with the Verkhovna Rada's Commissioner for Human Rights launched a nationwide communications campaign on consumer rights protection.

The campaign was aimed at raising public awareness about the rights and responsibilities of users of financial services.

As part of the communications campaign, the NBU and its partners informed Ukrainians about their rights and responsibilities as consumers of financial services, and what they should do if their rights are violated. The communications campaign lasted three months. During the campaign, tutorial videos were played on monitors in free legal advice centers, grocery stores in small district centers, in the subways of cities such as Kyiv, Dnipro and Kharkiv, and on monitors in local trains. The information was also distributed through social media platforms, the mass media, on the radio, and in bank offices.

Thanks to the joint efforts of the NBU, the Verkhovna Rada Commissioner for Human Rights, international organizations, and more than 50 partners within the #KnowYourRights campaign, over 12 million views and other types of reach were recorded, which was twice as many as had been planned at the beginning of the campaign.

#HryvniaAnatomy Communications Campaign

In July 2021, the NBU launched a nationwide communications campaign on the security of cash payments – #HryvniaAnatomy. The communications campaign was supported by law enforcement agencies and more than 50 partners: postal operators, store chains

and pharmacies, gas stations, and banks. The campaign was conducted for the population, bank cashiers, and employees of enterprises working with cash.

NBU experts, together with partners, reminded Ukrainians which banknotes and coins were in circulation, informed them about the elements of protection of banknotes, where to exchange banknotes and coins that are being withdrawn from circulation, or that are worn out or damaged, or the authenticity of which was in question.

To raise the awareness of cashiers and employees of companies working with cash, the NBU conducted training webinars and created educational posters and instructional and tutorial videos. Educational materials for the population were shared through social media, the mass media, partner sites, and on monitors at gas stations.

For the first time in the NBU's history, social advertising was placed during the campaign on billboards and city light stands in the regions; they were available in 13 local centers. There were also posters in subways, commercials in Intercity trains, and posters in small grocery stores in oblasts throughout Ukraine. More than 10 million views and other types of reach were recorded during the campaign.

#Cashless Communications Campaign

On 19 November, a nationwide communications campaign to promote cashless payments, named #Cashless, was launched.

The aim of the campaign was to inform Ukrainians about the benefits and convenience of cashless payments, as well as the rules for their security, while also promoting their popularity.

It is known that senior citizens in Ukraine, especially in small towns and villages, need support in handling cashless payments, as this topic requires not only financial literacy but also digital skills.

For educational purposes, the NBU launched a landing page called Cashless, which has detailed information on cashless

payments, and prepared information materials: posters, videos, articles for local media, and posts for social media. With the support of partners, we held a round table titled "When Everything Is Cashless in Ukraine" and a challenge to encourage the public to share their own experiences of cashless payments in Facebook posts.

The campaign is a sequel to the communications campaigns on cash payments security #HryvniaAnatomy and on anti-fraud measures #GoodbyeToFraud.

The timeframe is three months (it was due until 18 February 2022).

Coins for Kids Charity Campaign

In September, the NBU and the Tabletochki Charity Foundation launched a nationwide charity campaign called Coins for Kids. Its mission was to collect 25c-kopiika coins, which have been withdrawn from circulation, throughout Ukraine from 1 September to 13 October. Six banks with the largest branch networks partnered for the project. Some 2,371 bank branches from all over Ukraine took part in the campaign.

Children – preschoolers, schoolchildren, and students – were the most active participants. Some 4,370 educational institutions, work collectives, and organizations also joined in the campaign. The drive to collect coins in schools was large-scale and creative. Children held contests between classes, shared photos and videos on social media, used coins to create mosaic paintings, and conducted Charity Lectures events.

The total value of the coins collected was nearly UAH 2.7 million. NBU employees conducted their own charitable event to collect coins together worth UAH 104,000, other entities collected an additional UAH 200,000 in coins. In total, UAH 3 million was raised to help children with cancer. The money was spent on surgical equipment to treat over 1,000 children over the next seven years.

In addition to its important charity mission, the campaign helped withdraw 10.8 million coins that were no longer a means of payment, as well as boosting the culture

of charity, which goes hand in hand with finance.

Lessons about Hryvnia

The Ukrainian hryvnia celebrated its 25th anniversary on 2 September 2021. For this occasion, the NBU developed tutorial materials for teachers (syllabi, workbooks, presentations, thematic posters): The Banknotes and Coins of Ukraine lecture was created for primary schools; the Hryvnia is Our Symbol lecture was designed for secondary schools, and the Monetary Reform: What, Why, and How? lecture for high schools. The materials can be borrowed to create interesting thematic lessons.

The educational materials developed by the NBU were recommended by the Ministry of Education and Science of Ukraine. Schools from every oblast of Ukraine took part in a financial literacy lesson.

Open-Air Hryvnia Museum Exhibition

The Open-Air Hryvnia Museum interactive exhibition, dedicated to the hryvnia's 25th anniversary and set up as part of the celebrations of the 30th anniversary of Ukraine's independence, ran from 2 September to 30 September.

The exhibition was officially unveiled by NBU Governor Kyrylo Shevchenko and third President of Ukraine (2005–2010) and former NBU Governor (1993–2000) Viktor Yushchenko.

At the exhibition, the NBU partnered with financial market participants to present 18 interactive stands featuring cash and noncash hryvnias, the history of Ukrainian money, the design and security features of banknotes, inflation, savings, payment innovations, and more.

Five guides from the NBU's Money Museum and 13 trainees worked during the event. They conducted 142 free tours and quests in the time the Open-Air Hryvnia Museum exhibition was running. Audio guides voiced by NBU employees were available for self-guided tours.

The exhibition was visited by more than 30,000 residents of Kyiv and guests of the capital city,

which was three times more than had been expected. The exhibition was barrier-free and inclusive. Visitors included people with disabilities, including hearing and visual impairments. The NBU developed a special tutorial, the Hryvnia Without Barriers, for visually impaired persons.

The museum, located near the main Ferris wheel on Kyiv's Kontraktova Square, was open 24/7.

Savings Day Communications Campaign

On 31 October, a communications campaign on frugal consumption and the culture of savings was rolled out for schoolchildren to mark World Savings Day.

More than 3,300 children from all over Ukraine attended webinars organized as Savings Day events. The campaign also included two workshops (for making a piggy bank and an origami-style paper wallet); a syllabus on savings developed for teachers; a video contest, What Do I Raise Money For, which attracted 70 participants, more than half of whom received valuable presents from the NBU and event sponsors.

The campaign was held from 31 October to 7 November 2021.

Money Museum in Operation

The NBU's Money Museum continued to operate under quarantine conditions with all safety measures in place. In total, the Money Museum conducted 188 events for 2,804 visitors. Schoolchildren and students made up a significant share of them, accounting for about 69% of total visitor numbers.

To popularize the museum's collection, the NBU's Money Museum launched a video blog highlighting unique exhibits. In 2021, five Top 5 Exhibits videos were created. In each video, the museum staff talk about a thematic selection of exhibits from the museum collection, in the format of a video tour. By the beginning of 2022, the videos had exceeded 11,000 views.

Given the challenge posed by COVID-19, the Money Museum's activities were switched

to an online format. In 2021, online events accounted for 36% of the total number of events.

A virtual tour of the Money Museum was created with the support of the USAID Financial Sector Transformation Project. It allowed the museum's collection to become available to more visitors from different oblasts of Ukraine.

To create the virtual tour, panoramic views of the museum's exhibition and all glass cases were created, and 180 digital images of exhibits were reproduced in 3D format. Additionally, a panoramic view of the NBU's Teller Hall was produced.

The NBU's Money Museum was the first museum in Ukraine to offer visitors a hybrid format – a virtual tour accompanied by a real guide. The virtual tour accompanied by a guide is available for groups of up to 50 people from different parts of Ukraine or even the world. A virtual self-guided tour is also available, with up to 35,000 people able to view it simultaneously.

The display of exhibits in 3D format opened up new opportunities for visitors to examine museum items. Through a smartphone or tablet, a 3D image of an exhibit appears in the room with a visitor or even on their palm. There is no need to install additional apps on the user's phone to view the exhibits in augmented reality mode.

The virtual tour is available in two languages (Ukrainian and English). In addition, all information is displayed in text format.

In total, 532 views of the virtual tour were recorded in December 2021 (29 of them were accompanied by a guide). Schoolchildren and students from 20 oblasts of Ukraine went on virtual tours with a guide.

The Money Museum's 3D tour was added to the ICOMON (ICOM's International Committee for Money and Banking Museums) list of virtual tours.

Museum of Money Educational Center

Over the year under review, the NBU entered the active phase of a large-scale social project in the field of financial literacy – the creation of the Museum of Money Educational Center.

This is a unique project for Ukraine, which will consist of two components: the Educational Center, which will offer free training in financial literacy for the public, and an interactive, modern, cognitive, barrier-free, practical, useful, friendly Museum of Money. The Museum of Money will house a history area and a hall of numismatic products; an area featuring the hryvnia's life cycle; a module on the NBU and its main functions – ensuring price and financial stability; an area highlighting modern payment systems; halls educating the public on personal finance (first money, savings, taxes, insurance, pensions, investments), and much more.

The NBU attracted the best financiers of Ukraine to create the Museum. In particular, the Board of Trustees of the Museum of Money was established for this purpose. This advisory body included the NBU Governors who have headed the central bank at various periods of its existence – Volodymyr Matvienko, Viktor Yushchenko, Sergiy Tigipko, Volodymyr Stelmakh, Stepan Kubiv, and Yakiv Smolii. In September 2021, together with NBU Governor Kyrylo Shevchenko, they laid the first symbolic brick in the Museum of Money Educational Center's future building.

In 2021, the NBU held an art tender to develop a general creative concept for the Museum of Money Educational Center space, and the design of its exhibition. The winner of the tender was AMUZEUM LLC, which, under the project, is to develop a conceptual design for the new "Museum of Money" Educational Center that includes a general creative idea, a description of the concept, space planning, a scheme of thematic areas, as well as a schematic design of the exhibition – namely interior design, exhibition equipment, lighting, audiovisual design, a story line, and a list of special equipment needed for the center.

Predesign works entered their third stage; a feasibility report was developed on the basis of the provided conceptual solutions, while town-planning conditions and restrictions were agreed with agencies responsible for protecting cultural heritage.

According to the project's schedule, which has been approved by the NBU Board, the Museum of Money Educational Center is to open in 2024 in a three-story NBU building at 2a Kontraktova Square.

Goal 7.

Developing Innovations in Financial Sector

Studying Options for Introducing Digital Currency of the NBU (E-Hryvnia)

In 2021, the NBU continued to research the possibility of issuing own digital currency. As part of this research a comprehensive survey of Ukrainian fiscal market experts was conducted in order to find the best uses and determine the prospective demand for e-hryvnia. The regulator presented findings of the market player survey on the prospective demand for the central bank digital currency, e-hryvnia, in the published report.

Furthermore, in September 2021, E-hryvnia project was launched in order to determine the need for full-scale issue of Ukrainian digital hryvnia, study the use cases, best features, design, and architecture.

As part of the project, together with the Ministry of Digital Transformation and other public authorities, we are working on a vision of introducing own digital currency, i.e. the theoretical idea of e-hryvnia architecture, functioning, and use cases, including determining technical requirements.

At present, the NBU considers the following options for using e-hryvnia according to the findings of a survey of Ukrainian financial market players, our own research, and studying international experience:

- 1) e-hryvnia for retail cashless payments (with the “programmable” money and social transfers options)
- 2) e-hryvnia in the circulation of virtual assets (for instance, in the exchange and issuance of virtual assets, and in other transactions with these assets)
- 3) e-hryvnia for cross-border payments to expedite, cut the costs, and streamline cross-border payment.

Also, on 30 June 2021, the Verkhovna Rada of Ukraine adopted the Law of Ukraine *On Payment Services* prescribing that the digital money of the NBU is an electronic form of the monetary unit of Ukraine issued by the National Bank of Ukraine.

Goal 8.

Cyber Security in the Financial Sector

Cyber Security Status in the Financial Sector

In 2021, the regulator continued its efforts in advancing the NBU Cyber Security and building up capacities of the Cyber Security Incidents Response Team of the National Bank of Ukraine (CSIRT-NBU) to detect, respond, and neutralize cyber attacks and incidents.

Considering the continuing rise in the number and complexity of cyber threats and due to effective application of security suits and systems, ongoing improvement of information sharing mechanisms, and fruitful cooperation with Ukrainian banks and constituents of the national cyber security system of Ukraine, the regulator ensured timely detection, evaluation and effective response to cyber threats. In 2021, CSIRT-NBU examined 2,000 samples of malware, and informed Ukrainian banks on detected cybersecurity incidents and reported attempted cyberattacks.

The information sharing platform on current cyber threats deployed by the NBU in 2021, MISP-NBU, became one of the major information sharing instruments on pending cyber threats and was in demand among constituents of the cyber security of the banking and financial sectors of Ukraine. Today, MISP-NBU accumulates information provided by CSIRT-NBU, similar platforms (MISP) of CERT-UA, the Cyber Security Situation Centre of the Security Service of Ukraine, and the National Coordination Center for Cybersecurity of the National Security and Defense Council of Ukraine, as well as Ukrainian banks. In General, by the end of 2021, save for state agencies and constituents of the national cyber security system of Ukraine, 62 Ukrainian banks were connected to MISP-NBU (by the end of 2020 there were three banks).

The regulator continues to cooperate with European and US cyber security institutions for receiving assistance in organizing cyber security and cyber defense of the banking and financial sector of Ukraine, developing of the Cybersecurity Center and CSIRT-NBU, improving response and counteraction

instruments, sharing and distributing information on eminent cyber threats.

One of the accomplishments of CSIRT-NBU efforts was joining TF-CSIRT (Task Force on Computer Security Incident Response Teams) that combats and responds to pending cyber incidents. Becoming a TF-CSIRT member paves the way for CSIRT-NBU to the global community of combating and responding to cyber incidents and proves its compliance with international standards and gains trust of the CERT and CSIRT international teams.

The NBU also expanded cooperation with main constituents of the national cyber security system of Ukraine by accession in 2021 to the Memorandum of Cooperation in Information and Cyber Security entered by and between the National Security and Defense Council of Ukraine, the Ministry of Digital Transformation, the Administration of the State Service of Special Communication and Information Protection of Ukraine, and signed the Memorandum of Cooperation in Cyber Security and Defense with the Cyber Police Department of the National Police of Ukraine.

In 2021, the regulator continued developing remote servicing of bank customers. Specifically, by increasing the number of qualified certified electronic trust service providers and promoting electronic trust services in the banking system. So, in 2021 two more banks were granted the status of certified service providers by the certification center: First Ukrainian International Bank and Bank Alliance JSC. So, as of the end of 2021, the NBU and seven banks are certified providers of electronic trust service. The number of customers is about 5.1 million, and the number of generated electronic signatures – 2.175 billion.

Regulation and Supervision of Financial Sector Cyber Security

For enhancing security and performance of payment systems, in 2021, the Regulation On Information and Cyber Security in Payment

Systems was drafted and approved by NBU Board Resolution No. 43 dated 19 May 2021.

According to the Regulation On Identifying Critical Infrastructure Entities in the Banking System of Ukraine approved by NBU Board Resolution No. 151 dated 30 November 2020, the list of critical infrastructure entities in the banking system of Ukraine was approved (NBU Board Decision No. 148 On Critical Infrastructure Entities in the Banking System of Ukraine dated 20 April 2021).

For harmonization of documents of the payment market participants, including for streamlining operation conditions for information security, the NBU has drafted and posted on the NBU's official website new recommendations and frequent comments to payment service providers.

In 2021, the NBU has finalized updating the process of monitoring cyber security, information security, and electronic trust services provided by Ukrainian banks. A respective Regulation was approved by NBU Board Resolution No. 4 dated 16 January 2021 that entered into effect 21 January 2021. Introduced mechanisms also improved offsite control of bank's compliance with cyber and information security measures – already under the quarantine restrictions for preventing the spread of the COVID-19 infection – and increased capacities of banks to counter cyber threats.

Audit findings²⁸ on the external assessment of SWIFT infrastructure showed that the regulator provided adequate security of data and information in SWIFT local environment thus mitigating cyber risks when using modern IT and enhancing control of information security at the NBU and in SWIFT in general, as well as promoting quality and timely performance of the NBU functions.

In 2021, for the first time banks conducted a self-assessment of information and cyber security in their annual Report on Assessing Information and Cyber Security Risks.

Also, in 2021, the NBU continued to implement the risk-based approach to special onsite supervision of cyber security, information security, and electronic trust services provided by Ukrainian banks. Methodology documents were drawn up to define and standardize criteria and algorithms for applying the risk-based approach to planning onsite control measures and to regulate a standard and consistent approach to drawing conclusions on the outcomes of such measures on:

- performance of the information security risk management systems in banks
- integrity of the bank's compliance with the NBU's regulations on information and cyber security
- compliance with requirements for certified electronic trust services by banks certified to provide electronic trust services recorded in the Trust List based on the data submitted by the certification center
- level of managing information and cyber security risks by banks and evaluating the internal control system operating at all organization levels regarding the audited areas.

So, considering challenges and threats the NBU and Ukrainian banks face in the cyber environment, the regulator will continue to take resolute measures to improve the tailored supervisory mechanisms and favor responsible policies of banks on securing cyber resistance, and capability to continue business with pending cyber threats.

For advancing security of consumer rights in financial services, implementing measures for ensuring adequate information and cyber security for customers and providers of financial services, a survey was conducted of nonbank financial service providers, including insurance intermediaries, as well as the Credit Bureau on information and cyber security. According to the survey findings, overall nonbank financial institutions are compliant with information²⁹ and cyber security³⁰ requirements at the midlevel and comprehend the need for introducing such requirements.

28 In line with SWIFT Customer Security Controls Policy and SWIFT Customer Security Controls Framework v2021.

29 DSTU ISO/IEC 27001.

30 DSTU ISO/IEC 27032.



3

Institutional Development and Operational Excellence of the NBU



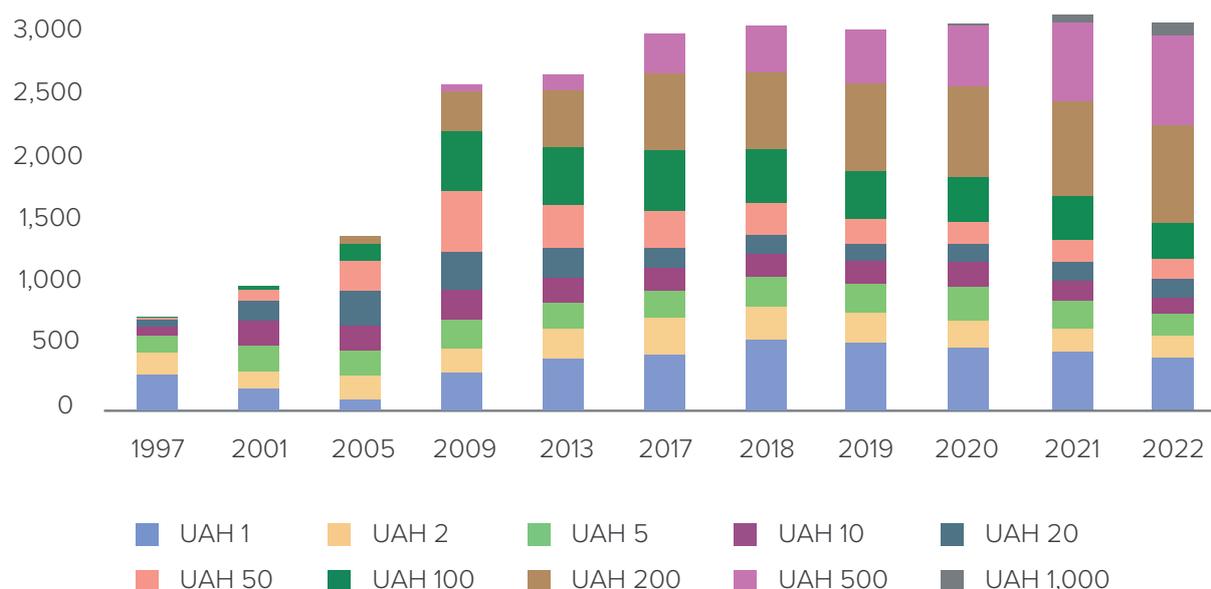
Goal 9.

Improving the Operational Efficiency

Creating Conditions for High-quality Cash Circulation

As of 1 January 2022, Ukraine had UAH 627.6 billion in banknotes and coins in circulation.

Number of banknotes in circulation as of the year start, million notes



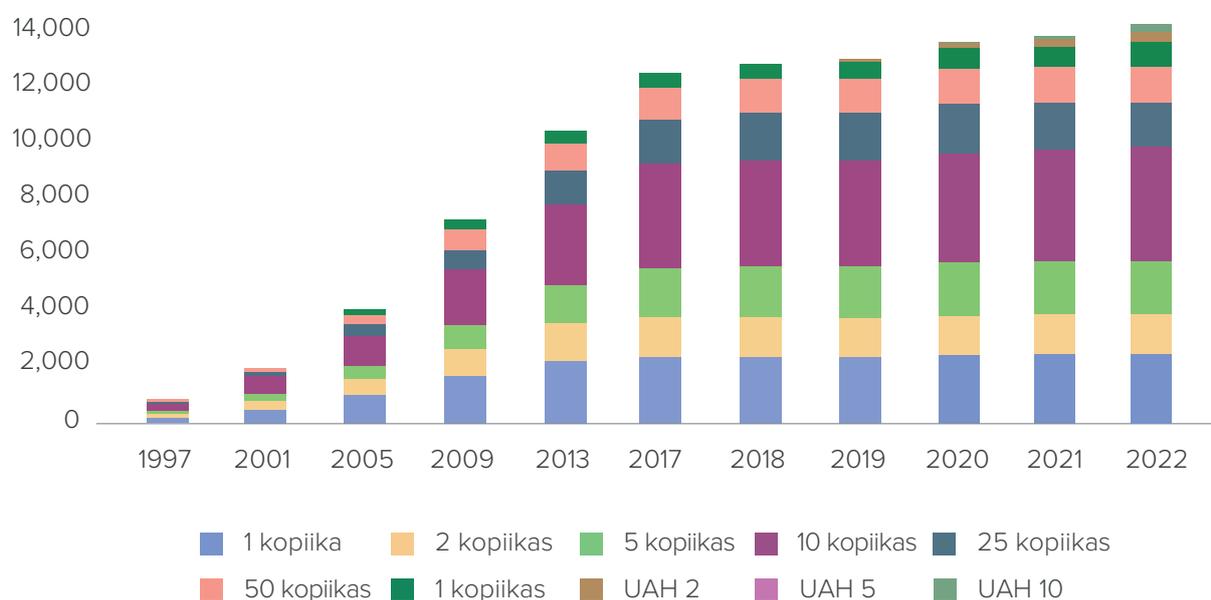
In particular, the numbers of banknotes and coins in circulation were as follows:

- about 3.0 billion banknotes worth UAH 622.6 billion
- about 14 billion small-denomination and circulating coins worth UAH 4.8 billion

- 22.6 million commemorative and bullion coins worth UAH 140.8 million.

In 2021, the number of banknotes in circulation decreased by 58.5 million (1.9%), while the number of coins increased by 455.6 million (3.4%).

Number of coins in circulation as of the year start, million coins



The 200-hryvnia banknote and 10-kopiika coin are the most circulated denominations (25.1% and 28.6%, respectively).

At the same time, by late 2021, 88.8 million banknotes of the highest denomination banknote, the 1,000-hryvnia banknotes, have been in circulation after being launched on 25 October 2021.

As of 1 January 2022, there were 71 banknotes and 162 coins (small denomination and circulating coins that are legal tender) per capita in Ukraine (as of 1 January 2021, 72 banknotes and 149 coins).

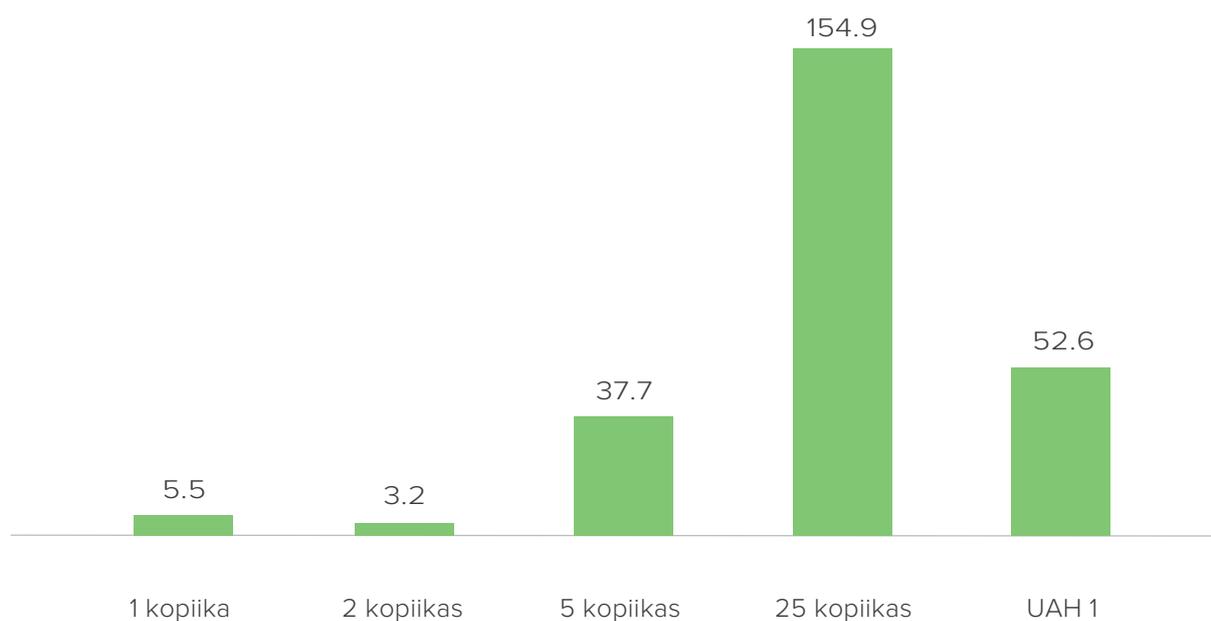
Within the structure of currency in circulation, low-denomination coins shall be included through 30 September 2022, while 25-kopiika coins through 20 September 2023, for as long

as citizens can exchange them for coins and banknotes of other denominations in circulation.

In 2021, the NBU continued withdrawing small-denomination (1-, 2-, 5-, and 25-kopiika) coins and circulating coins of 1-hryvnia denomination, which were issued before 2018, from circulation.

Between 1 October 2019 and 31 December 2021, the old-design coins of the 1-, 2-, 5-, and 25-kopiika denomination and 1-hryvnia denomination – issued before 2018 – were withdrawn from circulation in the total number of 253.9 million coins (1.8% of the total number of coins in circulation), including: 5.5 million coins of 1-kopiika denomination, 3.2 million coins of 2-kopiikas denomination, 37.7 million coins of 5-kopiikas denomination, 154.9 million coins of 25-kopiikas denomination, and 52.6 million coins of 1-hryvnia denomination.

Withdrawal of coins of the 1-, 2-, 5-, and 25-kopiika and 1-hryvnia denominations from circulation (without cash balances of the NBU), millions of coins

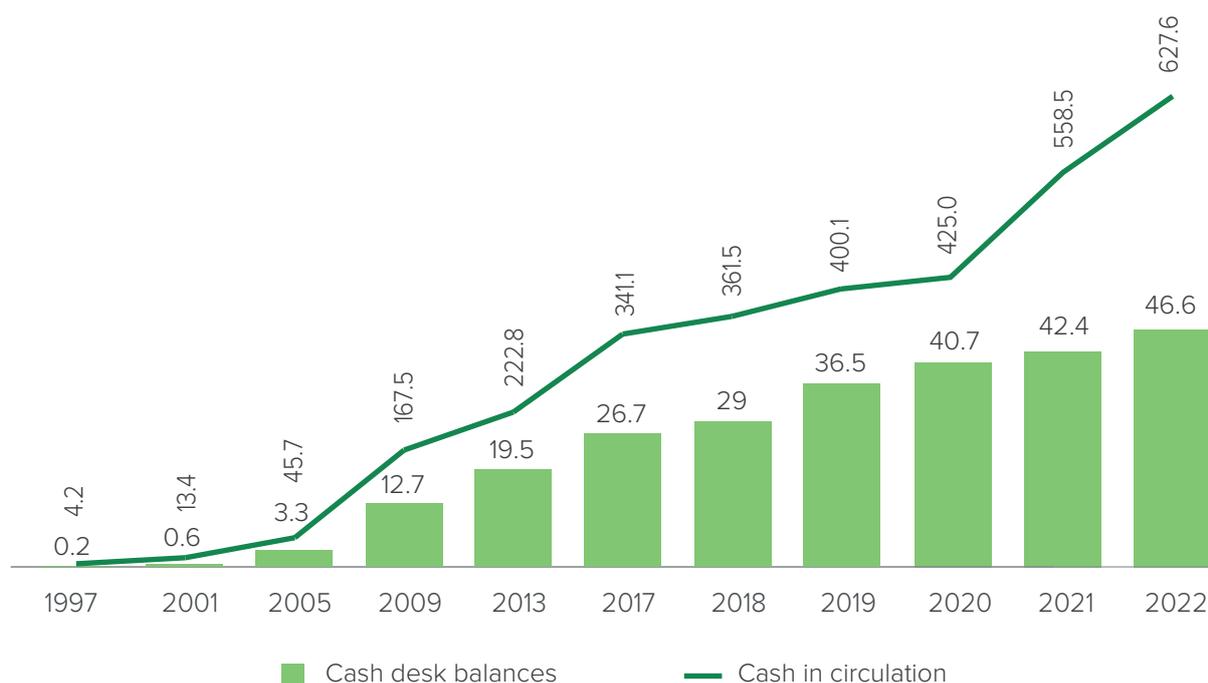


In 2021, the amount of cash in circulation increased by UAH 69.1 billion, or by 12.4% (in 2020, by UAH 133.4 billion, or by 31.4%). It means, the growth rates were lower in 2021.

As of 1 January 2022, cash balances in banks' cash desks reached UAH 46.6 billion. In 2021, the amount of cash in banks' cash desks increased by UAH 4.2 billion, or by 10%.

In 2021, there was an increase in cash turnover of banks and SIT companies on cash receipts, as well as an increase in cash turnover of banks on cash disbursements. Thus, in 2021, in comparison to the previous year, the volume of cash turnover on cash receipts to banks' cash desks and SIT companies increased by UAH 404.4 billion (by 19.1%), and that of cash turnover on cash disbursements from banks' cash desks increased by UAH 337.7 billion (by 15.0%).

Cash in circulation and cash desk balances at banks



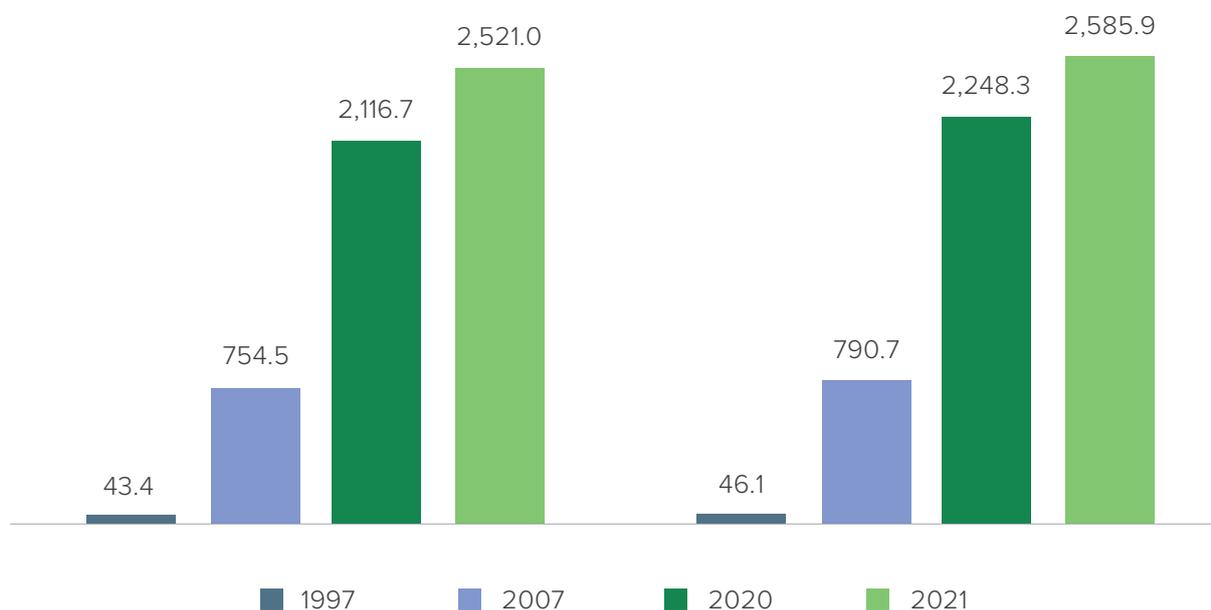
In 2021 versus the previous year, the most sizable increase was observed in the following cash receipts:

- Receipts from sales of all services increased by UAH 107.9 billion, or by 52.8%, to UAH 312.2 billion.
- Payment card-based receipts increased by UAH 104.6 billion, or by 14.3%, to UAH 837.7 billion.
- Receipts from trade increased by UAH 65.5 billion, or by 8.9%, to UAH 800.1 billion.
- Cash receipts from foreign currency sales increased UAH 52.6 billion, or by 45.4%, to UAH 168.4 billion.
- Cash receipts of individuals' deposits increased by UAH 24.3 billion, or by 17.3%, to UAH 164.7 billion.

Cash desk turnover at Ukrainian banks and CIT companies

Receipts to bank's cash desks

Disbursements from bank's cash desks



2021 saw reduction in the volumes of cash delivered to cash desks of banks as loan repayments by UAH 3.1 billion, or 9.7%, to UAH 29.3 billion.

In 2021 versus the previous year, the most sizable increase was observed in the following cash disbursements from banks' cash desks:

- Payment card-based disbursements increased by UAH 251.1 billion, or 14.9%, to UAH 1,939.3 billion.
- Cash disbursements to purchase foreign currency increased by UAH 58.4 billion, or by 41.1%, to UAH 200.4 billion.
- Disbursements of individuals' deposits went up by UAH 8.2 billion, or by 7.3%, to UAH 120.4 billion.
- Disbursements for payment of labor costs and scholarships increased by UAH 5.8 billion, or by 10.4%, to UAH 61.2 billion.
- Disbursements for other purposes increased by UAH 19.8 billion, or 22.0%, to UAH 109.6 billion

The balance of foreign exchange transactions – the excess of cash disbursements to purchase foreign currency over cash receipts from foreign currency sales – amounted to UAH 32.0 billion in 2021 (compared to UAH 26.2 billion in 2020).

Cash Processing

In 2021, automated banknote processing systems BPS 1040/M7 handled 712 million

banknotes (288 million banknotes less than in 2020), including 233.7 million fit banknotes, and 91.3 million worn out banknotes. Besides that, 368.3 million banknotes were shredded, and 18.7 million banknotes were processed via manual reconciliation.

At the same time, in 2021, banks transferred 330 million fit banknotes to the NBU's five regional cash circulation units and the Central Vault for handling. This was 65% as little as in 2020 (940 million banknotes).

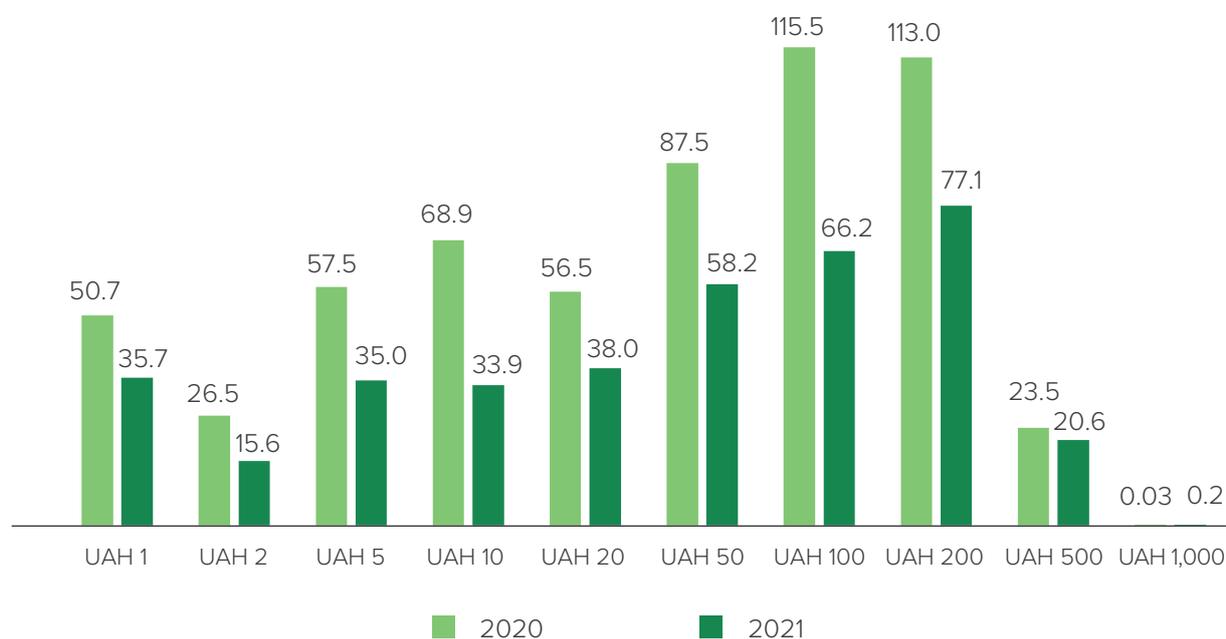
In particular, the banks transferred the following amounts of fit banknotes:

- to cash circulation units – 130 million banknotes, or 76% less than in 2020 (540 million banknotes)
- to the Central Vault – 200 million banknotes, which increased by 50% compared to 2020 (400 million banknotes).

Withdrawal of Worn out Banknotes

In 2021, the NBU and authorized banks withdrew 380.4 million worn out banknotes from circulation in the amount of UAH 36.8 million. The number of the withdrawn banknotes was 219.1 million banknotes, or about 37% less than in 2020 (599.5 million banknotes in the amount of UAH 52.5 billion).

Withdrawal of worn out banknotes by denomination, million banknotes



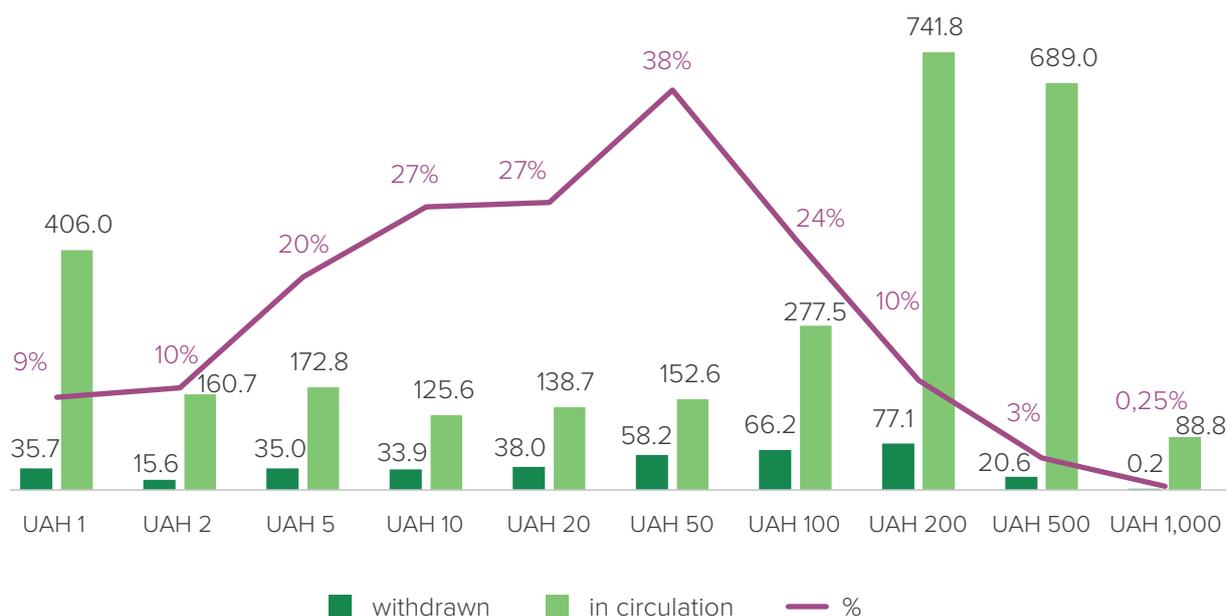
The banknotes withdrawn from circulation in 2021 make up about 13% of banknotes in circulation as of 1 January 2022 (2,953.5 million banknotes).

Worn out banknotes of almost all denominations were subject to withdrawal. The largest percentage of worn out banknotes withdrawn from circulation were in the following denominations: 50-hryvnia banknotes – 15.3%, 100-hryvnia banknotes – 17.4%, and 200-hryvnia

banknotes – 20.3% of the total amount of banknotes withdrawn from circulation.

Among the banknotes being in circulation as of 1 January 2022, the worn out banknotes of the following denominations had the largest percentages of withdrawals in 2021: 10-hryvnia and 20-hryvnia banknotes – 27% each, 50-hryvnia banknotes – 38%, and 100-hryvnia banknotes – 24%.

Withdrawals of worn out banknotes from circulation in 2021 compared to banknotes in circulation as of 1 January 2022



On inspections

In 2021, the NBU ensured implementing its statutory control function on compliance by the authorized banks with NBU regulations on the organization of work with cash reserves in custody, the procedure for their storage, proper sorting during their automated processing, and oversight of cash issuance into circulation. In line with the NBU Functional Strategy of Cash Circulation and Payment Systems Development for 2021–2024, audits and inspections of the authorized banks were performed.

In 2021, the NBU carried out 62 audits of the NBU's cash stock in custody and inspections of cash storage conditions by standalone units of the authorized banks located in 27 cities of Ukraine (22 oblasts of Ukraine were covered). A total of 82.7% of the total number of structural

units of the authorized banks have been audited/inspected, in particular:

- CB PrivatBank JSC – 23 audits/inspections
- Oschadbank JSC – 13 audits/inspections
- Raiffeisen Bank Aval JSC – 18 audits/inspections
- FUIB JSC – 8 audits/inspection.

Conducting Said audits/Inspections Contributed to:

- carrying out qualitative control of the NBU's cash stock in custody
- ensuring control of conditions for safekeeping and compliance with the procedure for storage conditions of the NBU's stock in custody
- carrying out control of quality of cash issued in circulation by the authorized banks and stored in the vaults of their structural units.

In order to control that the real estate required for organization of cash circulation in the regions is used for intended purposes, the NBU, during the reporting year, carried out inspections of the real estate leased by the authorized banks in accordance with joint decisions of the NBU Board and State Judicial Administration of Ukraine.

In 2021, the NBU also carried out unscheduled inspections of banks and their structural units with the aim of ensuring control of banks compliance with NBU regulations on cash circulation.

NBU Revenues from Cash Services Provided to Banks and Cash Collection Companies

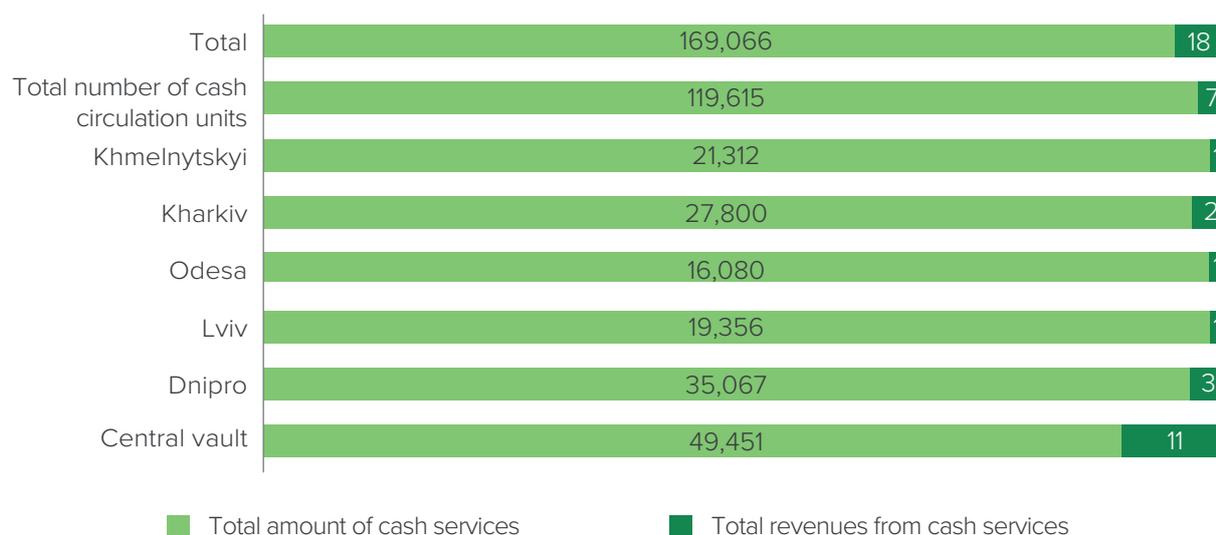
In 2021, the NBU's revenues from the provision of cash services amounted to UAH 18.5 million (in 2020, UAH 13.1 million), in particular:

- Cash circulation units received UAH 7 million in revenue for cash services provided to banks.
- The Central Vault received revenue amounting to UAH 11.5 million for cash services provided to banks and collection companies.

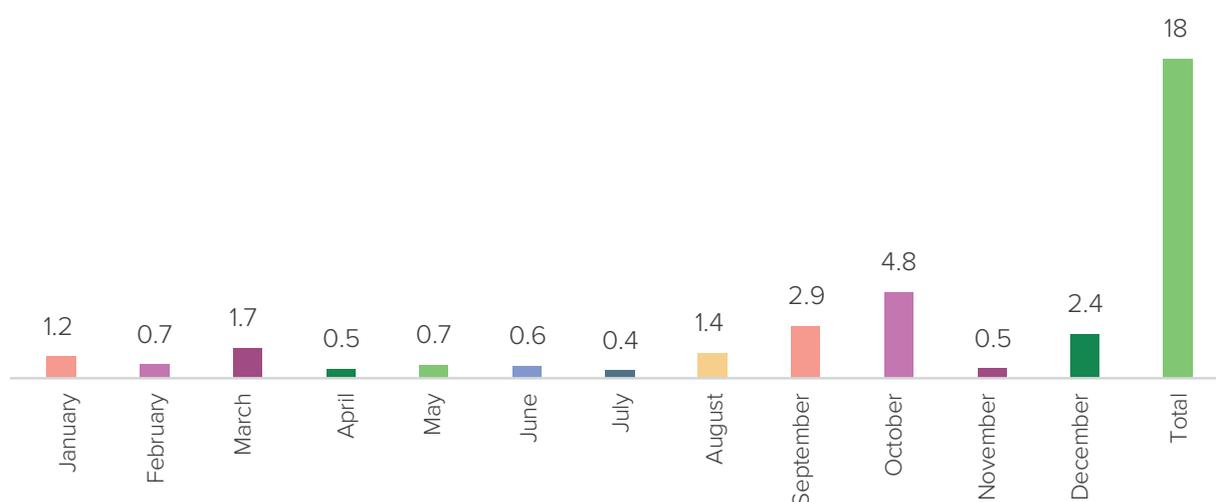
In 2021, the NBU did not update the tariffs for cash services provided to banks and cash collection companies.

In 2021, the amount of cash services came to UAH 169 billion. Out of them, free-of-charge services were rendered in the amount of UAH 141 billion (almost 84% of the total amount of cash services).

Total amount of cash services and revenues received from cash services in 2021, UAH millions



Revenues received from cash services provided to banks in 2021, by months, UAH millions



Withdrawal of Counterfeit Money from Circulation

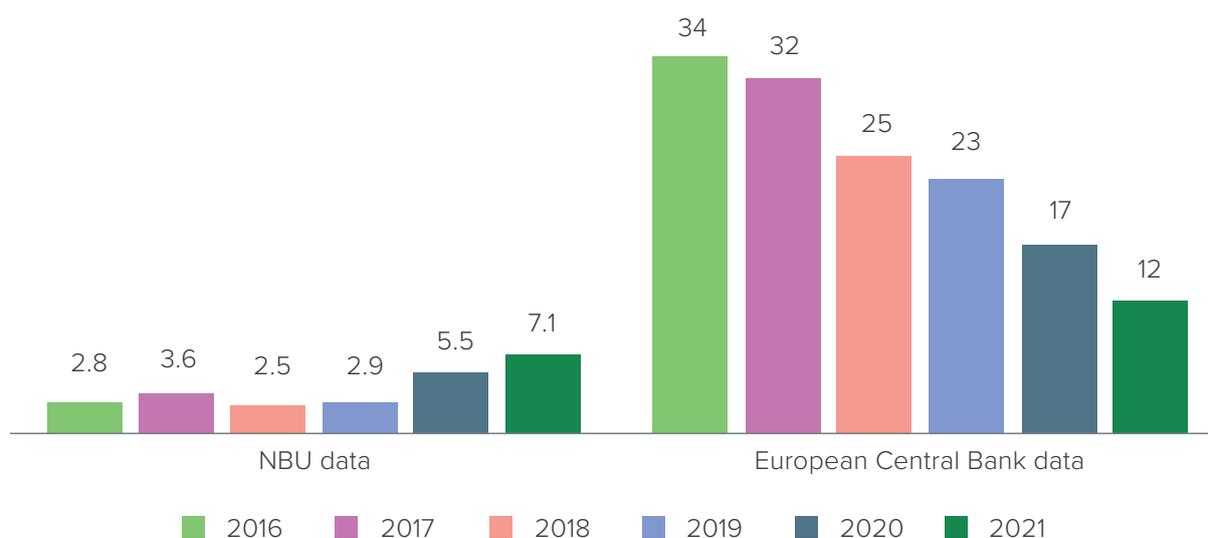
The NBU continually monitors the withdrawal of counterfeit money from circulation and confirms a relatively low amount of counterfeit hryvnia banknotes.

In 2021, the number of counterfeit banknotes withdrawn from circulation accounted

for 0.00071% of total banknotes in circulation in Ukraine's banking system. This means there was approximately 7.1 counterfeit banknotes per one million authentic hryvnia banknotes.

For comparison, in 2021, this indicator in the EU was approximately 12 counterfeit euro banknotes, according to the official website of the European Central Bank.

Number of counterfeit banknotes per million authentic banknotes



In 2021, counterfeit hryvnia banknotes of new design made up only 4% of the total quantity of the counterfeits withdrawn from circulation in the banking system of Ukraine. Accordingly, the number of counterfeit hryvnia banknotes of new design per million authentic banknotes was only 0.3 banknotes in 2021.

Throughout 2021, the NBU withdrew from circulation almost 21,000 counterfeit hryvnia banknotes worth about UAH 8.2 million (in 2020, about 17,000 counterfeit hryvnia banknotes worth UAH 6.3 million were withdrawn).

The increase in the number and amount of counterfeit banknotes withdrawn from circulation was due to an increase in the volume of withdrawals of counterfeits of the old design of the following denominations:

- 500-hryvnia banknotes designed in 2006 (59% of the total number of the withdrawn counterfeit banknotes)
- 200-hryvnia banknotes designed in 2007 (31%).

At the same time, in 2021, the number of counterfeit banknotes decreased for the following denominations:

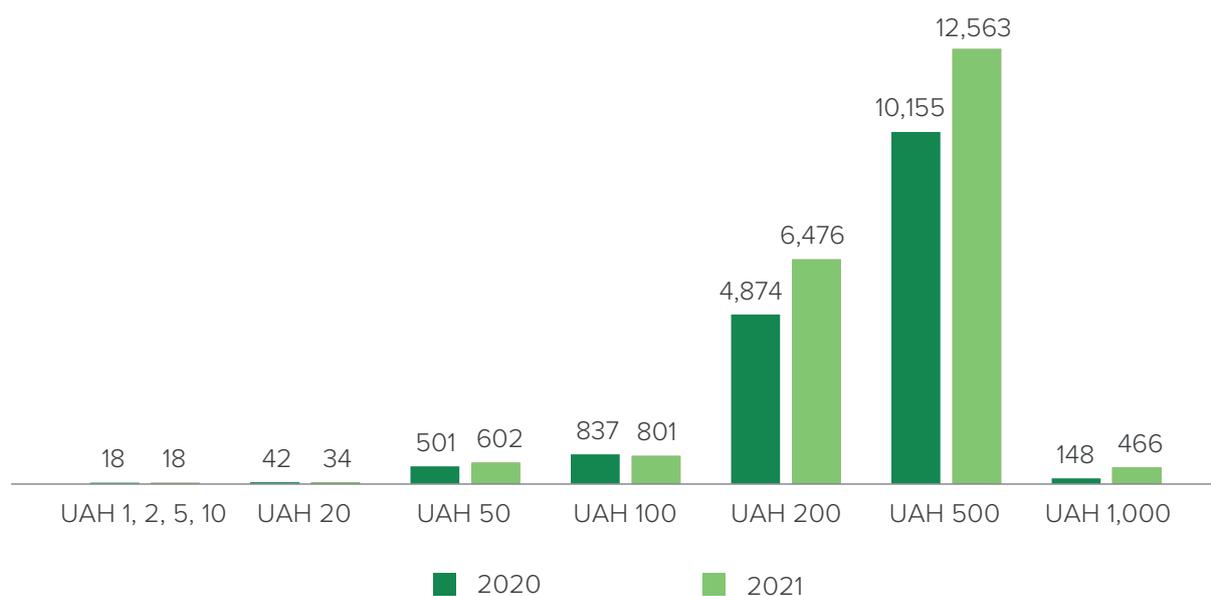
- 100-hryvnia banknotes – by 4%
- 20-hryvnia banknotes – by 19%
- 5-hryvnia banknotes – by 45%.

The vast majority (98%) of counterfeit banknotes withdrawn from circulation were among four denominations:

- 500-hryvnia banknotes (60% of the total number of withdrawn counterfeit notes and 77% of their total value)
- 200-hryvnia (31% and 16%, respectively)
- 100-hryvnia (4% and 1%, respectively)
- UAH 50 (3% and 0.4%, respectively).

Counterfeit UAH 1, UAH 5, UAH 10, UAH 20, and UAH 1,000 banknotes that the NBU withdrew accounted for just 2% of all withdrawn banknotes.

Number of withdrawn counterfeit hryvnia banknotes, by denomination



In 2021, the following counterfeit foreign currency banknotes were withdrawn from circulation:

- U.S. dollars (72% of all counterfeit foreign

currency banknotes withdrawn from circulation)

- euros (27%)
- Russian rubles and Swiss francs (1%).

Number of withdrawn counterfeit foreign currency banknotes



Counterfeit USD 50 and USD 100 notes accounted for 17% and 82%, respectively, of all withdrawn counterfeit U.S. dollars; counterfeit EUR 50 notes accounted for 90% of all withdrawn counterfeit euros; counterfeit RUB 1,000 and RUB 5,000 notes accounted for 14% and 86%, respectively, of all withdrawn counterfeit Russian rubles.

In 2021, the NBU conducted the All-Ukrainian information campaign on the security of cash payments on [Hryvnia's Anatomy](#). The campaign was aimed at teaching Ukrainians to quickly check the authenticity of hryvnia banknotes and reminding the population which banknotes and coins are in circulation and which are no longer accepted for payments.

Within the context of the campaign, there were developed and presented training and information materials, videos posted on the NBU's official website and youtube channel, on public transportation. Besides, the NBU provided relevant professional comments to the media.

Within the framework of the NBU's Competence Center on Counteracting Money Counterfeiting, in 2021, there were held 23 workshops/webinars for employees of banks' cash desks and trade establishments on the issues related to checking money authenticity and fitness for use as currency (about 3,240 participants took place in them).

We constantly cooperate with the Strategic Investigations Department and Cyber Police Department of the National Police of Ukraine, expert institutions of the Ministry of Internal Affairs of Ukraine, Security Service of Ukraine, European Central Bank, and other central banks of world countries.

Issue and Sales of Commemorative and Bullion Coins

In 2021, the NBU circulated 3,748,400 pieces from 37 issues of commemorative coins (28 titles), including: two gold coins, 13 silver coins, 19 nickel silver coins, and three zinc-based alloy coins.

In 2021, the NBU also issued the following coins into circulation:

commemorative coins to celebrate the 30th anniversary of Ukraine's independence. These celebratory coins, which are made using a new laser technology, show the long process of the formation, consolidation and development of the Ukrainian state.



a silver coin celebrating the 25th anniversary of Ukraine's constitution



the commemorative coin celebrating Vasyl Slipak, a world-famous opera singer from Ukraine, a hero of Ukraine, a recipient of the Order of the Gold Star and the Order for Valor, first degree, a knight of liberty, a volunteer, and a volunteer soldier who was codenamed "Myth" and who was killed in 2016 fighting Russian aggressors in Ukraine



a silver coin called Inheritance, which continues the philosophical theme, and which celebrates

folk art depicting the culture, science and daily routines that Ukrainians have inherited from previous generations



a 1 hryvnia gold commemorative coin, which was struck in 2010 and which replicates the 1 hryvnia circulation coin “Volodymyr the Great” designed in 2004. It celebrates Kyiv Prince Volodymyr the Great, who was a prominent statesperson, politician, and creator of a powerful Medieval European state – Rus-Ukraine. This coin became one of the numismatic highlights of 2021.



In addition, the central bank issued commemorative coins that celebrate:

Ahatanhel Krymsky, a unique specialist in Slavic studies, linguist, and translator

Lesia Ukrainka, a genius poetess of the Ukrainian people

Vasyl Stefanyk, an unsurpassed master of expressionist short stories

Yevhen Konovalts, a military leader, who symbolizes the continuity of Ukrainian liberation movements

The NBU also continued to issue coins from the Ukraine’s Armed Forces series. These coins, which are appreciated by Ukraine’s

soldiers, celebrate individual units and branches of the armed forces: the Airborne Force of Ukraine’s Armed Forces, the Ground Forces of Ukraine’s Armed Forces, and Ukraine’s Armed Forces.



Dmytro Bortnianskyi, one of the founders of the classical music tradition

Ivan Piddubnyi, a renowned athlete whose name has become a symbol of his people’s indomitable spirit

80 Years since the Babyn Yar tragedy, a Holocaust massacre that occurred in the Babyn Yar area in Kyiv during World War II

the 400th anniversary of the Battle of Khotyn, an important event in European history in the first half of the 17th century, which effectively decided the fate of Christian civilization



Olesko Castle and Saints Peter and Paul Garrison Church, which are the architectural landmarks of Lviv Oblast

The Institutional Development and Operational Proficiency of the National Bank of Ukraine

Kyiv Fortress, a complex of unique defensive fortifications

Lviv and Mykolaiv astronomical observatories, centuries-old research institutions

the Reshetylivka carpet-making style, Ukrainian heritage from Poltava oblast

Ukrainian rescue workers, who have one of the most dangerous and difficult professions, protecting the population and the territory of the state from natural and man-made disasters, and lighthouses, navigation facilities.

The NBU also continued the Ukrainian Flora and Fauna and Oriental Calendar series.

Cossack Regalia, a set of four silver commemorative coins, became one of Ukraine’s numismatic highlights of 2021. This set celebrates Cossack regalia – the attributes of power. These regalia are associated with a heroic age of Ukrainian history – an age that has become an inexhaustible source of national dignity, love for freedom and state-building aspirations. These coins bear the prints of real historical seals that the NBU received from a private collection in Sheremetievs’ Museum while the central bank was developing the designs of these coins.



To celebrate the 30th anniversary of Ukraine’s independence, the NBU also circulated:

the 30th Anniversary of Ukraine’s Independence, a newly designed bullion coin featuring a celebratory logotype on its reverse



commemorative 20, 50, 100, 200, 500 and 1,000 hryvnia banknotes that replicate the design and size and incorporate all of the security features of the respective circulation banknotes. The front of these commemorative banknotes has the logotype “30th anniversary of Ukraine’s independence” screen printed in OVMl on the watermark. What is more, the NBU issued sets of these commemorative banknotes in albums and in envelopes.



The NBU also issued:

the 2021 Ukrainian Coin Set to celebrate 25 years since currency reform in Ukraine

a silver souvenir 200 hryvnia banknote replicating the 200 hryvnia banknote designed in 2019 and commemorating the 150th anniversary of the birth of Lesia Ukrainka

the following commemorative medals celebrating 25 years since the establishment of the Ukrainian Constitutional Court – the constitutional body that ensures the constitutional legality and supremacy of the Constitution of Ukraine; 100 years since the establishment of Luhansk Taras Shevchenko National University – one of the oldest higher educational establishments in Luhansk oblast, and a center of education, learning and culture in eastern Ukraine; 100 years since the Establishment of the Ukrainian Free University – the only university that was established abroad by Ukrainian intellectuals in exile, and where teaching was done in Ukrainian; and 100 years since the establishment of the National University of Pharmacy – the only educational establishment in Ukraine that teaches pharmacy.

Overall, in 2021, the NBU issued 12 types of souvenir products, totaling 250,300 units

With a view to publishing the 2021 Banknotes and Coins electronic catalogue and updating information on the relevant page of the NBU's official website, the central bank prepared and processed new information and photographic materials.

In 2021, Ukrainian commemorative coins received awards at the 39th Coin of the Year International Competition, which is held annually by World Coin News, an influential numismatic publication, with support from the Journal of East Asian Numismatics.

A panel of more than 100 numismatic experts from around the world named winners from among about 400 coins produced in 2020. Over 50 countries submitted their coins to the competition.

At the first stage, the 100 best coins from 37 countries (10 coins in each of the 10 categories) were selected.

The Ukrainian coin called the Frontline was awarded a prize in the Most Inspirational Coin category (in this category a jury selects coins with a design reflecting an idea, institution or an individual that show the heartfelt desire to preserve peace, freedom and human rights).



Four other 2020 Ukrainian commemorative coins were chosen as nominees. These coins are as follows: the 75th Anniversary of the Victory in the Second World War, the XXXII Olympic Games, Fallen Defenders' Day, and the Eneida (a set of nine silver coins).

Overall in 2021, on the domestic market, the NBU sold 2.36 million Ukrainian commemorative and bullion coins, souvenirs and other products worth a total of UAH 396.9 million. These included:

2.31 million **commemorative coins** worth a total of UAH 156 million (1,600 gold coins, 27,580 silver coins, 724,640 nickel silver coins, 1,600 non-precious bimetal coins, and 1,124,670 zinc-based alloy coins)

44,300 **bullion coins** worth UAH 176.14 million (6,600 gold coins worth UAH 139.82 million and 37,700 silver coins worth UAH 36.32 million) In 2021, the NBU bought only 192 Ukrainian bullion coins from the public (152 gold and 152 silver ones), which proves that these coins are being used for investment purposes.

In 2021, the NBU started selling its numismatic products via its online shop at the following link: <https://coins.bank.gov.ua>. This enabled customers to pay for numismatic products in a cashless form, using PROSTIR, Visa and MasterCard cards, to buy numismatic products online 24/7 and on any day (including days-off), and to receive their orders in the closest post office that belongs to the logistical and postal companies that have been authorized by the NBU. The NBU plans to continue developing these services next year.

Via its online shop, the NBU in 2021 sold 721,800 numismatic products (863 gold coins, 6,000 silver coins, 19,600 bullion coins, 445,000 zinc-based alloy coins, 153,000 nickel silver coins, and 97,300 other products).

In 2021, the NBU sold 37 titles of commemorative coins, souvenir products, and newly issued sets through its online order services for households. Over 160,000 numismatic products were ordered through that service.

In 2021, the NBU sold 690 numismatic products worth UAH 11.6 million at the 12 auctions it held to sell commemorative coins and souvenir products.

Overall in 2021, the NBU generated profit of about UAH 326 million from domestic sales of Ukrainian commemorative and bullion coins, souvenirs, and other products (up by UAH 92 billion compared to 2020), and paid UAH about 30 million in taxes to the state budget.

The NBU also continued its efforts to promote Ukrainian numismatic products on the international numismatic market. In 2021, the NBU worked together with Coins Weekly and Cosmos of Collectables – German internet publications, which published information about the NBU's commemorative and bullion coins and souvenir products throughout 2021.

In order to comply with the terms of the agreements concluded between the NBU and nonresident companies, the central bank sold 7,350 Ukrainian commemorative and bullion coins worth a total of EUR 180,000 and USD 52,000 to Germany, Poland and Hong Kong. The NBU plans to increase its efforts in this area, by expanding the list of countries to which it sells its numismatic products.

Integrating and Improving Approaches to Planning, Management, and Control

On 30 September 2021, the NBU Board approved a concept for operational planning at the NBU. In December 2021, the goals, objectives, and activities of NBU structural units were planned on the basis of the approved operational planning concept.

The goal of the introduction of operational planning at the NBU is to apply a systemic approach to the effective realization of the NBU's strategic goals at the operational level, and to ensure the coordination of its activities.

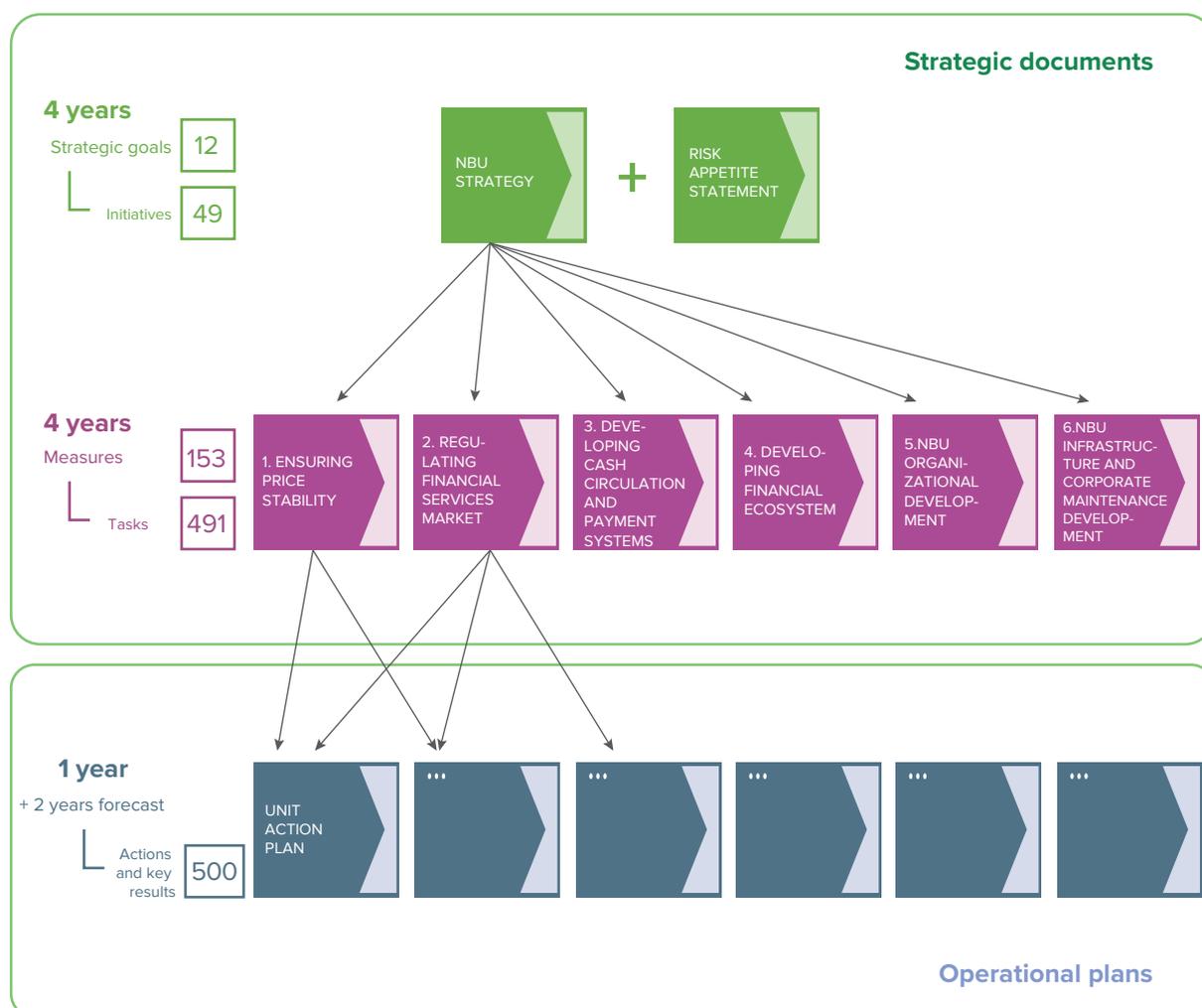
An operational plan is a tool used by NBU structural units for planning, management, control, and the evaluation of results in two interrelated aspects of activities:

- current results of the processes that the NBU structural unit carried out
- the implementation of strategic changes planned by the Strategy and functional strategies of the NBU.

NBU structural units prepare operational plans in detail for one year and as a forecast for the next two years. That is, in December 2021, the units planned their activities in detail for 2022 and as a forecast for 2023 and 2024 (until the end of the strategic cycle).

Input information for the NBU's operational planning is the following:

- approved strategic documents – the Strategy, functional Strategies, and the NBU's risk appetite statement
- the register of the NBU's processes and administrative acts, which describe the implementation of these processes
- the project portfolio of the NBU.



Operational planning will ensure the functioning of the following effective mechanisms:

- the cascading of responsibility for the result
- transferring (incorporating) changes in current activities
- planning and dividing responsibilities
- setting up self-monitoring over the performance of tasks
- planning and providing resources
- controlling and monitoring progress in achieving results
- providing data to monitor the progress of the Strategy's implementation.

A unit's operational plans provide incentive mechanisms for employees – the establishment of planned key performance indicators (KPIs)

for the employees who are responsible for the implementation of planned tasks and activities.

Operational monitoring is carried out once every six months. Its implementation contributes to the timely control and detection of risks of failure to achieve the NBU's strategic goals and the planned performance indicators of processes in the operating cycle, as well as responding to them to eliminate or minimize their impact. Thus, the results of operational monitoring are the basis and an integral part of monitoring the achievement of strategic goals.

The Strategy and Development Department is responsible for the functioning of operational planning processes.

It ensures there is coordination and support for operational planning activities, and is responsible for organizing the process of strategy implementation planning at the NBU, and for implementing the strategy implementation monitoring system.

Internal Audit

In 2021, the Internal Audit Department assessed and helped improve the NBU's corporate governance, risk management, and internal control processes by conducting audits.

During 2021, the Department conducted 20 audits to assess the effectiveness of risk management and internal controls over the core activities of the NBU's operating units. These included audits of the implementation of IMF recommendations based on the results of an assessment of safeguards, and pursuant to the Memorandum of Economic and Financial Policies with the IMF.

The audits were conducted in 2021, in accordance with the Plan for Internal Auditing of the NBU's operating units. The plan was approved by the NBU Council.

These planned audits covered all areas of the NBU's activity, and applied process- and risk-based approaches to the audited areas.

In 2021, the Internal Audit Department regularly communicated its audit results and identified risks to the NBU Council, the Council's Audit Committee, and the NBU Board. The findings of the audits were frequently referenced during meetings of the Council and its Audit Committee to assess the performance of the internal control function.

The NBU in 2021 also implemented a comprehensive program for quality assurance and improving internal auditing. It included a program for the professional development of auditors developed for the Internal Audit School that has been established for NBU employees.

It should be noted that the high quality of the NBU's internal audit has previously

been confirmed by external independent experts. Pursuant to the Law of Ukraine On the National Bank of Ukraine, the conformity of the NBU's internal audit to the International Standards for the Professional Practice of Internal Auditing has been confirmed by a report and the conclusions of independent experts from the central bank of the Netherlands, which were produced during an external assessment.

The independent external assessment acknowledged both the maturity and the considerable progress and substantial improvements made to the internal audit function at the NBU. The NBU received the highest possible score for the quality of its internal auditing – "Level 5: Optimizing" – in the scale of assessment for public sector organizations (including central banks), which affirms the bank's use of the highest standards, principles, and requirements for effective internal auditing.

Employee Motivation System

We maintain and continue to develop a modern motivation system, aimed at encouraging employees to accomplish objectives and tasks with the best quality and efficiency. Given the high level of competition on the labor market, the NBU is constantly improving its rewards system for employees, while ensuring its compliance with the requirements of Ukrainian legislation and wage market trends.

Recognizing the risks of the external environment – namely the spread of the acute respiratory disease COVID-19 – in 2021 we provided employees and their family members (when necessary) with financial support for treatment expenses. Such assistance was also provided to NBU retirees.

With the quarantine restrictions remaining in place throughout Ukraine, the NBU extended the options for remote working for its employees, and is also considering the possibility of retaining these options after the lifting of quarantine.

We also worked on improving human resource processes, in particular through automation. Thus, in 2021, we continued

automating HR analytics and conducted job grading.

	NBU Head Office	Banknote Printing & Minting Works
Average age of employees, years	45	47.5
Average length of service at the NBU, years	12	13
Women/men at the NBU, %	53.8/46.2	33.5/66.5
Women/men in management, %	46/54	25/75
Women/men not in management, %	54.5/45.5	35/65
Number of full-time employees (FTEs) as of 31.12.2021	3,457	1,239
Employee turnover in 2021, %	3.9	1.5

Training, Personnel Development, and Corporate Culture

In the reporting year, we worked amid quarantine restrictions. Almost all training was conducted online. In 2021, there was a significant increase in both the number of training events and development activities, and the number of employees who took part in them.

In particular, the total number of training events in 2021 was 770, which was 41% up on 2020. The number of attendees exceeded 10,000.

During the year, hard skills training, in particular with the involvement of international providers, tended to dominate compared to soft skills training (459 versus 240 events in 2021, respectively). Most soft skills training events were conducted by the NBU's internal trainers.

During the year, we continued to perfect our educational formats, having launched and maintained peer-to-peer training, during which employees shared their professional knowledge. Coworkers from different departments conducted 33 training events attended by 4,057 NBU employees.

The biggest change in training formats was seen in club events. As a result, the Oratory Skills Club (for six months) and the Communications Club (for three months) became highly popular with NBU employees.

Online courses delivered as part of the remote learning system (RLS) gained even greater popularity, having effectively reached almost all NBU employees. In addition, remote knowledge sharing platforms were put into operation.

Over the year, all activities scheduled for NBU personnel development programs were fully implemented. The respective educational events were attended by 53 section heads from various levels of management. Under a program for the development of personnel resources, NBU trainees took part in a number of activities focused on developing competences, conflict management, and solving complex tasks and issues. NBU workers designated as mentors gained new knowledge in the fields of coaching, behavior in nonstandard communications, properly and effectively organizing the mentoring process, and the mentor's role in the NBU's corporate culture.

In 2021, the emphasis in events promoting corporate culture was on strengthening employees' engagement in new formats of interaction, through corporate volunteering projects, developing communities, and launching new initiatives.

All of the projects planned were carried out within the general cycle of corporate volunteering programs (charitable initiatives by employees).

Two large-scale projects to support orphanages were implemented:



- The Library of Dreams – new books were bought for children from the Center for Children’s Social and Psychological Rehabilitation of Chernivtsi Regional State Administration’s Child Welfare Service
- St. Nicholas Day’s 35 Good Deeds – children from orphanages in Kyiv, Sumy, Lviv oblasts, as well as from family-type homes located in Luhansk oblast, received gifts from their wish lists.

During the year, new social and charitable initiatives were launched:

- NBU Running Club
- My Eco Choice: A New Life for Old Things! – used clothes were collected for further sorting and reuse or recycling.

In 2021, an annual corporate culture survey looked into the factors influencing employees’ identification with the organization, work engagement, confidence, and the Happy Employee indicator. According to the findings, the overall level of commitment to the organization was 72%, and the Employee Loyalty Index stood at 66. The results of the survey will be used in planning and implementing measures to develop the NBU’s corporate culture.

Human Resource Management

We actively worked on perfecting the processes of personnel administration, in particular through automating the scheduling of annual

leave for NBU employees, simplifying an algorithm for managers at all levels to handle requests to work remotely and to take vacations by introducing a bulk approval process. The personnel accounting system was adapted in line with amendments to the labor legislation through providing a new type of maternity leave and introducing e-certificates for sick leave.

The NBU continued the large-scale hiring of new employees. An individual approach to descriptions of job openings, taking into account an Employer Value Proposition (EVP) for various age groups, made it possible to attract a large number of relevant candidates with the corporate, professional and personal competencies required by the NBU.

In addition, the recruitment process was automated – the NBU’s Personnel Search and Selection Automation System was put into operation.

In 2021, the NBU hired 329 new employees, while 311 persons were dismissed and 883 persons were transferred to another position or job.

To effectively reduce the stress level of new employees at work, special attention was given to the process of new employee adaptation in 2021. As a result, over 96% of those surveyed praised these adaptation measures and the support the NBU provides to new employees.

Goal 10.

Partnership and Communication with Stakeholders

International Cooperation at the NBU

In 2021, the NBU actively developed its international cooperation, changing its format and adjusting it further to new realities.

The bilateral cooperation agenda was broadened through continued productive relations with other central banks and financial supervisors in 2021. New topics, such as the regulation of nonbank financial services, sustainable and green finance, and CBDCs, were added to the traditional mix – in particular in the NBU's dialogue with the regulators from Armenia, Croatia, Hungary, Georgia, Lithuania, Poland, Sweden, and the UK.

The NBU also significantly expanded its list of international cooperation agreements. Acting in its capacity as a nonbank financial sector regulator, the NBU made took the important step of signing memorandums of understanding, cooperation and exchange of information on insurance supervision with the Bank of Lithuania, the Polish Financial Supervision Authority, and the Central Bank of Armenia. These agreements will facilitate the effective exchange of information about the insurance market participants supervised by the NBU and its peers abroad, with the goal of preventing and counteracting cross-border insurance fraud.

With the tendency continuing to be to hold events in an online format during global pandemic, the NBU was able to expand its international technical assistance. The number of such events grew by almost 60%, engaging 16% more international partners.

This year, NBU experts were interested in studying the best practices and international experience in the following areas: monetary policy implementation, financial stability, banking supervision and regulation, payment system operation and the introduction of innovations, consumer rights protection for financial services, efficient communications, NBFI supervision and regulation, and so on.

Also during 2021, the NBU strongly promoted sustainable finance in Ukraine, in line with the global concept of sustainable development and our country's European integration vector. The bank also continued active cooperation with its international partners in this area, in particular developing the Sustainable Finance Development Policy 2025, which was prepared with the help of the International Finance Corporation.

Green initiatives were also facilitated by the NBU's membership of the Network for Greening the Financial System (NGFS), a group of central banks and supervisors committed to sharing best practices and contributing to research into greening the financial system.

The NBU also joined the Global Financial Innovation Network (GFIN) last year. As a GFIN member, the NBU will be engaged more in exchanges of experience, information, and analytics with other regulators abroad, and will be able to obtain expert assistance on designing a regulatory sandbox in line with best practices.

General issues of central banking	<ul style="list-style-type: none"> • Central Bank Governors' Club of Central Asia, the Black Sea Region and Balkan Countries • European Fund for Southeast Europe (EFSE) Advisory Group
Banking Supervision	<ul style="list-style-type: none"> • Basel Consultative Group of The Basel Committee on Banking Supervision of the Bank for International Settlements (BCG) • Group of Banking Supervisors from Central and Eastern Europe (BSCEE) • Vienna Initiative
Financial Stability	<ul style="list-style-type: none"> • Financial Stability Board Regional Consultative Group for Europe (FSB)
Statistics	<ul style="list-style-type: none"> • Irving Fisher Committee on Central Bank Statistics of the Bank for International Settlements (IFC)
Financial Education	<ul style="list-style-type: none"> • OECD International Network on Financial Education (OECD/INFE)
Cash circulation	<ul style="list-style-type: none"> • BPS International Users Group
Macroeconomic Issues	<ul style="list-style-type: none"> • Euro Area Business Cycle Network (EABCN)
Green And Sustainable Finance	<ul style="list-style-type: none"> • Sustainable Banking and Finance Network (SBFN) • Network for Greening the Financial System (NGFS)
Credit Unions	<ul style="list-style-type: none"> • International Credit Union Regulators' Network (ICURN)
FinTech And Innovations	<ul style="list-style-type: none"> • Global Financial Innovation Network (GFIN)
Capital Markets	<ul style="list-style-type: none"> • International Capital Market Association (ICMA)

The International Monetary Fund, World Bank Group, European Union, European Bank for Reconstruction and Development, as well as other central banks and financial regulators remained key international development partners of the NBU. The NBU also continued to cooperate with the U.S. Agency for International Development (USAID) on the Financial Sector Transformation and Credit for Agricultural Producers projects. Among the projects implemented jointly with the European Bank for Reconstruction and Development were the Program for the Implementation of the Administrative Base of Law on Financial Restructuring, the Model-Aided Framework for Banking and Capital Market Stability Assessment, and new projects – in particular the Support for the Restructuring of the Financial Sector of Ukraine, and the Support for the Alignment of Ukraine's Regulatory Framework and Supervisory Practices with EU Prudential Standards in the Banking Sector projects. The NBU also cooperated with the International Finance Corporation on the Financial Inclusion for Growth Project, implemented in partnership with the Swiss Confederation and the UK, together with the Geneva-based Graduate Institute of International and Development Studies as part of the Bilateral Assistance and Capacity Development for Central Banks (BCC) Program.

roundtables to share its experience with the financial community. Among the international partners that joined these events were central banks and financial regulators from more than 60 countries, as well as experts from international organizations and research institutions from other countries.

The increasing demand for the NBU's expertise regarding various aspects of banking sector operation was an important achievement last year in the field of technical cooperation. This heightened demand spurred the NBU to introduce the annual planning of events in which the NBU acts as a TA donor for other central banks and financial regulators. In 2021, the number of requests for TA from the NBU reached 15. The central bank held both bilateral and multilateral events. The most requests came from the following countries: Armenia, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Georgia, Greece, Israel, Italy, Kazakhstan, Kyrgyzstan, Lithuania, Luxembourg, Moldova, Spain, Tunisia, Turkey, and Uzbekistan. The NBU extended its geographical reach and covered a wider array of topics: strategic development and change management, banking supervision, macroeconomic analysis, statistics and reporting, FX reserve management, central bank international cooperation, and so on.

In 2021, the NBU continued to be a platform for expertise sharing. The regulator held 14

The NBU actively contributed to discussions about the current economic agenda when taking

part in events organized by its international partners. BCBS-BSCEE-FSI Europe High-Level Meeting on Banking Supervision, 20th BIS Annual Conference, BIS Annual General Meeting, Regional Consultative Group meetings, 33rd Annual Conference of the Group of Banking Supervisors from Central and Eastern Europe, Vienna Initiative Full Forum, ICURN Annual Conference, and ICMA 52nd Annual General Meeting and Conference.

Another area of the NBU's international cooperation is taking part in events aimed at increasing Ukraine's appeal to investors. Over the year, the NBU's experts took part in the following well-known investor events: The Bank of America Small Talks Symposium (online), the Emerging Markets Credit Conference, the Annual Ukrainian Investment Roadshow, the UK-Ukraine Fintech summit (London), and the Ukraine Reform Conference 2021 (Vilnius). In order to provide up-to-date and reliable information about economic conditions in Ukraine, financial sector reforms and the further plans of the regulator as a guarantor of price and macroeconomic stability, the NBU had a series of meetings with experts from rating agencies (Scope Ratings, S&P Global Ratings, Fitch Ratings, and Ratings and Investment Information).

During the year, the NBU organized regular meetings with foreign diplomats in order to discuss bilateral relations and support for Ukrainian financial sector reforms from its international partners.

Foreign investment is one area that the NBU worked on when cooperating with WTO members. Experts from the central bank contributed to drafting the provisions of the multilateral agreement on promoting investment for development. The NBU also took part in the negotiations on e-commerce and domestic services regulation held by the WTO. The National Bank considers its involvement in the process of forming Ukraine's international relations system extremely important, as it is convinced that the National Bank's international activities should be in line with the state's goals and the current trends in the world economy that are actually being discussed by international organizations.

Cooperation with International Financial Institutions

The NBU Governor and other representatives as usual participated in the virtual Spring and Annual Meetings of the International Monetary Fund and World Bank Group (5–11 April 2021 and 11–17 October 2021 respectively), and the Annual Meetings of the European Bank for Reconstruction and Development (28 June–2 July 2021).

The program of cooperation with the IMF remained the central bank's priority. During the year, the NBU actively worked on the first review of the current Stand-By Arrangement. Joint work by the NBU, the Ukrainian government, and our partners from the IMF resulted in the approval by the IMF Executive Board on 22 November 2021 of the first review of the Stand-By Arrangement. The IMF also decided to grant Ukraine another tranche of approximately USD 700 million (in equivalent) in funds under the program, and to prolong the program until June 2022.

At the beginning of 2020, the NBU also took an active part in the preparation of a joint project with the World Bank (the Economic Recovery Development Policy Loan – ER DPL) worth a total amount of USD 700 million. The ER DPL project was approved by the World Bank's Board of Executive Directors on 26 June 2020. In 2021, Ukraine received two tranches under the ER DPL that were used to finance the general fund of the state budget.

European Integration

The NBU successfully carried out all of the activities in the sphere of the European integration planned for 2021, which were primarily focused on the implementation of the EU-Ukraine Association Agreement. In 2021, the following key laws of Ukraine aimed at implementing the EU *acquis* were adopted:

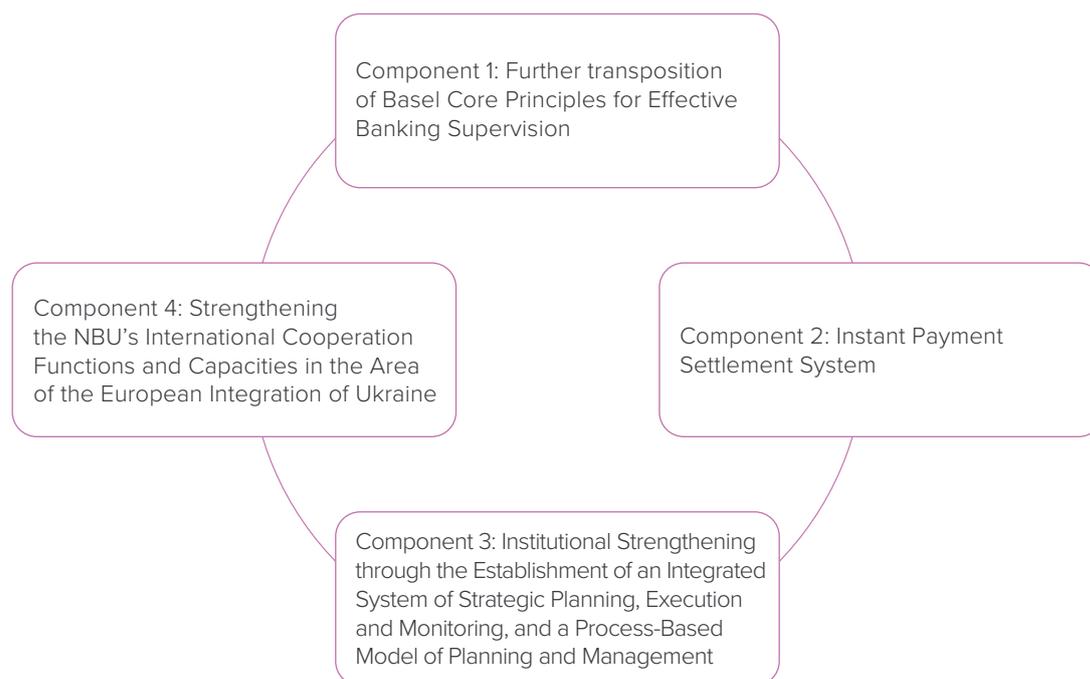
- Law of Ukraine No. 1587-IX *On Amendments to Certain Laws of Ukraine on Improving Corporate Governance in Banks, and Other Operational Issues of the Banking System*
- Law of Ukraine No. 1591-IX *On Payment Services*. The implementation of this law will modernize the Ukrainian payment market, lay the groundwork for its development, and build a legal framework to integrate the payment systems of Ukraine and the EU.



- Law of Ukraine No. 1909-IX *On Insurance* introduces a new model of regulation that aims to establish in Ukraine a solvent, stable, and competitive insurance market that will properly protect the rights of insurance service consumers.

For the purpose of bringing the regulation and supervision of financial institutions in Ukraine into line with European practices and standards, in 2021 the NBU continued active cooperation under technical assistance projects with the EU, and the Twinning Project.

The NBU is continuing to interact with the supervisory authorities of EU member states, and with EU institutions, namely the EBA and EIOPA.



Together with the Consortium of Polish and Lithuanian national banks, in 2021 the NBU implemented the EU Twinning project on Strengthening the Institutional and Regulatory Capacity of the National Bank of Ukraine to Implement the EU-Ukraine Association Agreement. Under the TA project on Strengthening the Regulation and Supervision of the Non-Bank Financial Market (EU-FINREG) the NBU continued to work on developing the insurance market and other nonbank financial sectors, surveyed financial service providers regarding their self-assessments of their compliance with sound market conduct practices, and implemented the All-Ukrainian campaign on consumer rights protection, Know Your Rights.

In cooperation with the EU Project: Introduction of EU Practices on Accounting, Financial Reporting and Audit in Ukraine (EU-FAAR Project) the NBU developed the Ukrainian taxonomy XBRL IFRS for 2020 and continued to develop the Ukrainian XBRL IFRS taxonomy for 2021.

Last year the NBU's representatives took part in a series of events held by bilateral bodies of Ukraine-EU association: the Sixth Meeting of the EU-Ukraine Association Committee on Trade Configuration, the Sixth Meeting of Cluster 1 of the Subcommittee on Economic and other Sector Cooperation of the EU-Ukraine Association Committee. The NBU also joined in the process of preparing for meetings of the EU-Ukraine Parliamentary Association Committee and the EU-Ukraine Association Council.

In 2021, steps were taken to ensure the disbursal of the second EUR 600 million tranche of macrofinancial assistance under the 5th EU macrofinancial assistance program.

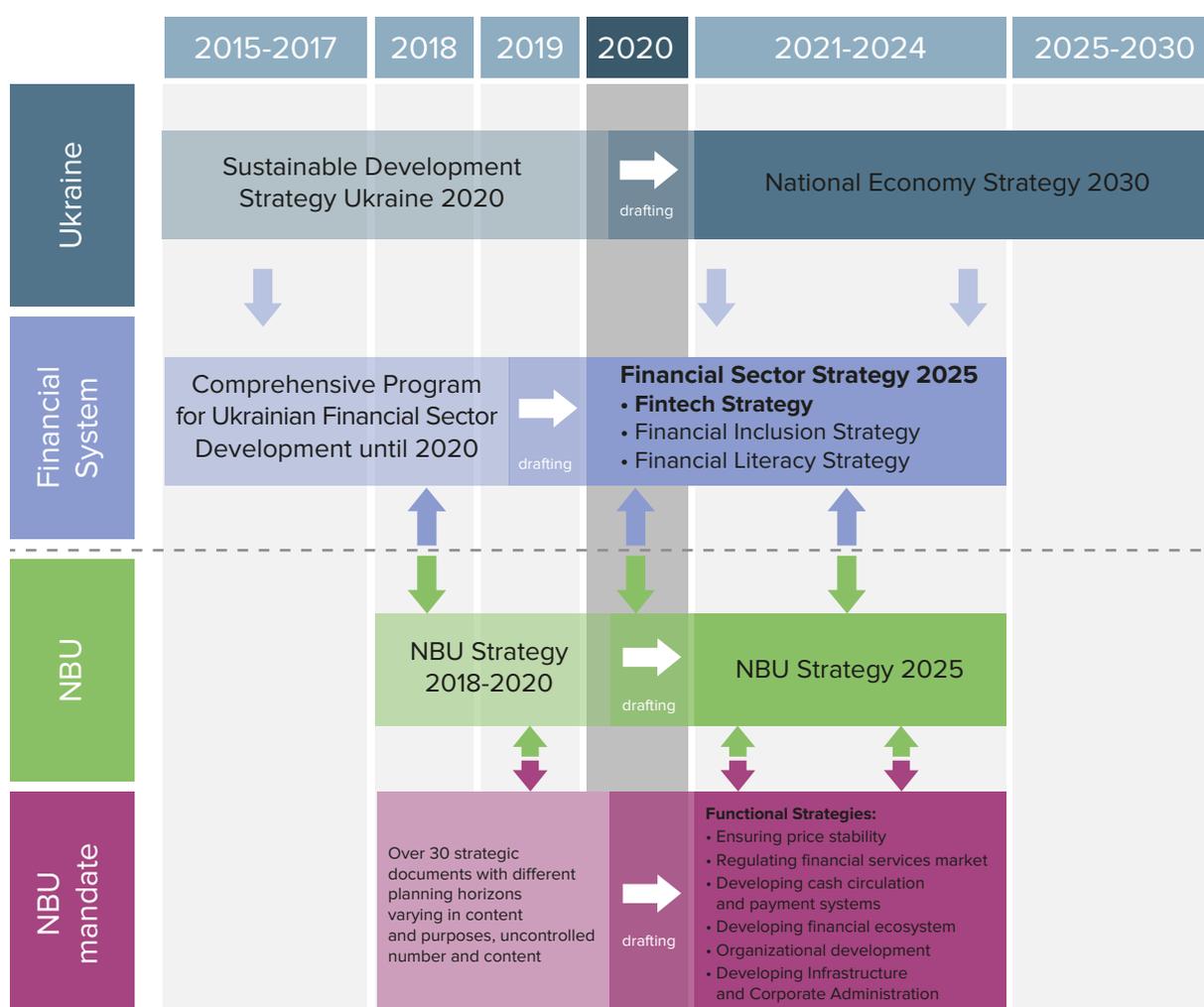
Interagency Strategies

The NBU's strategy is closely related to interagency strategies and with the National

Economic Strategy of Ukraine until 2030. The terms for developing and the horizon for planning in 2015–2020 for interagency strategies differed from those in the NBU’s strategy. In the current strategic cycle, the planning horizon has been expanded from three to four years in order to further synchronize the planning of the NBU’s strategy and interagency strategies – the Strategy for Ukrainian Financial Sector Development until 2025, and the Strategy for Fintech Development in Ukraine until 2025. The interagency strategy measures for which the National Bank is responsible are included in the central bank’s strategy.

The National Bank of Ukraine, the National Securities and Stock Market Commission, the Ministry of Finance of Ukraine, and the Deposit Guarantee Fund are jointly implementing the Strategy for Ukrainian Financial Sector Development until 2025. This strategy aims to ensure that financial sector regulators consolidate their efforts in order to further reform and develop Ukraine’s financial sector in line with best international practices, and through implementing the measures envisaged by the EU-Ukraine Association Agreement and other international agreements to which Ukraine is a party.

The interrelationship between the NBU’s strategic documents, the financial ecosystem and the country



In 2021, this strategy continued to be successfully implemented. On 31 March 2021, the NBU published a revised Strategy for Ukrainian Financial Sector Development until 2025, together with a report on the strategy’s implementation in 2020.

In 2021, financial sector regulators collected and analyzed proposals regarding the strategy from those who are implementing it, field experts, and from financial market representatives. These proposals, which were approved by stakeholders, in Q1 2022 were to be submitted



for consideration to the Financial Development Committee.

The Strategy for Fintech Development in Ukraine until 2025 (the “Fintech Strategy”) is a step-by-step plan for creating in Ukraine a full-fledged fintech ecosystem with innovative financial services and accessible digital services. The Fintech Strategy draws from the key areas set forth in the Strategy for Ukrainian Financial Sector Development until 2025.

In September 2021, the NBU conducted a meeting with stakeholders and fintech company representatives to discuss proposals and groundwork in relation to the Fintech Strategy. The NBU plans to revise this document in the near future.

2021 also saw the first graduation of students who completed a mini MBA program “Digital Finance 4.0.” This is an important element for the Fintech Strategy. The program mainly aims to provide all financial market participants with an inclusive academic education in the run-up to the implementation of open banking standards, and as set forth in the relevant Split Law. This will enable anyone who wishes to regularly obtain knowledge about digitalization trends in the financial sector, regulation standards, international standards and best practices in IT management. They will also be able to acquire skills in implementing cutting-edge technologies and practices.

Relationships with Stakeholders

In 2021, the NBU governor and deputy governors, on a regular basis, took parts in events involving business community representatives. These events were held to enhance Ukraine’s investment attractiveness, with a view to informing a wide range of stakeholders of the current stable situation on the financial market and the NBU’s plans to develop the market further.

Among other things, these events included the Business Environment and Investment Climate organized by the ACC, the UK-Ukraine FinTech Summit (in London), meetings with EBA member companies, meetings with FLIFI members, the National Ukraine 30 Forum, Dragon Capital’s Virtual Roadshow, and the Investment Climate in the Post-pandemic Ukraine event. There were also other meetings designed to boost investors’ confidence in Ukraine and to present the country

as a reliable partner and an attractive jurisdiction for investment.

One of the landmark events that took place early last year was the signing of a loan agreement between Ukraine’s Ministry of Finance, the IFC (a member of the World Bank Group) and UkrGasbank. The agreement enables the bank to convert the loan funds into its authorized capital. The agreement was signed by the country’s top officials – Ukrainian President Volodymyr Zelenskyi, Prime Minister Denys Shmyhal, and Finance Minister Serhii Marchenko.

In 2021, the NBU continued to maintain its partnership relations with the Office of the National Investment Council, which facilitates dialogue with the investment community. An important aspect of the cooperation was the NBU’s provision of information products to the Office of the National Investment Council, which the office is able use in its communications with leading international companies and international financial institutions to promote Ukraine’s investment image.

As usual, the NBU’s contribution to law-making, which is an integral part of the central bank’s activities, sought to introduce global best practices in the national laws that govern the financial sector.

This was evidenced by the involvement of top NBU officials in area-specific committees of the Ukrainian parliament. Overall in 2021, NBU representatives:

- attended 19 meetings
- attended two meetings in which the NBU Governor participated
- attended 12 meetings in which NBU deputy governors participated
- attended 12 meetings in which directors of NBU departments participated.

What is more, NBU deputy governors, department directors, and subject matter experts attended meetings of other committees of the Ukrainian parliament. These committees were:

- The Economic Development Committee – 1
- The Committee on Ukraine-EU Integration – 4
- The Committee for Organizing State Power, Local Self-Government, Regional Development, and Urban Development – 2
- The Committee on Social Policy and Protection

of Veterans' Rights – 7

- The Anti-Corruption Policy Committee – 4
- The Committee on Agricultural and Land Policy – 1
- The Digital Transformation Committee – 1
- The Budget Committee – 1
- The Committee on National Security, Defense and Intelligence – 1.

In 2021, the NBU conducted over 30 offline and online meetings with financial services market participants to present its views on legislative initiatives the central bank supported while they were being considered by the Ukrainian parliament.

- In 2021, the NBU put forward large-scale initiatives to bring the functioning of the nonbank financial services market to order, and these were approved by parliament. Among other things, the NBU prepared and submitted for parliament's consideration proposals regarding Ukraine's Law *On Financial Services and Financial Companies* (this law was adopted as a whole on 14 December 2021), a new version of Ukraine's Law *On Insurance* (this law was signed by the Ukrainian president on 17 December 2021), and a new version of Ukraine's Law *On Credit Unions* (this draft law was pending a repeat second reading on 6 December 2021).
- The NBU also continued to be involved in efforts to streamline banking sector regulation. In order to bring Ukrainian law into line with best international practices, the NBU assisted in preparing and considering draft Law of Ukraine *On Amending Certain Laws of Ukraine on Improving Corporate Governance in Banks and Other Operational Issues of the Banking System* (signed by the Ukrainian president on 2 August 2021).
- In addition, in complying with Ukraine's international commitments, the NBU drew up proposals to Ukraine's Law *On the National Bank of Ukraine* in order to streamline its activities. The NBU team presented the institution's view on Ukraine's draft Law *On Amending Certain Laws of Ukraine Concerning Certain Issues Related to the Activities of the National Bank of Ukraine* when the Ukrainian parliament was considering this law (this law was signed by the Ukrainian president on 8 November 2021).
- In 2021, together with Ukraine's Ministry of Economy and the Export Credit Agency, and within its statutory mandate, the NBU

continued to take measures to promote exports. Among other things, the central bank proposed amending Ukraine's Law *On Ensuring a Large-scale Expansion of Ukrainian Exports of Goods (Work and Services) through Insurance, Guarantees and Reducing the Cost of Export Credits*.

The amendments concerned the regulation of, and supervision over, the activities of the Export Credit Agency, with a view to enabling the agency to provide financial services more effectively. Parliament's relevant committee supported these amendments when considering draft law # 3793 at second reading.

- In order to substantially upgrade the Ukrainian payment market by bringing it into line with global trends, NBU experts drew up proposals and contributed to the consideration of the draft Law of Ukraine *On Payment Services* (signed by the Ukrainian president on 29 July 2021).
- With a view to improving the legal protection of lending service consumers, the Ukrainian parliament adopted the Law of Ukraine *On Amending Certain Laws of Ukraine on Consumer Protection during the Resolution of Past Due Debts (on collection agencies)*. This law, which was drafted in close cooperation with NBU experts, was signed by the Ukrainian president on 12 April 2021.
- The NBU also expressed its views when parliament was considering other draft laws in 2021. These included Ukraine's Law *On Amending Certain Laws of Ukraine on Streamlining the Procedures for Resolving Banks and Satisfying the Claims of the Creditors of These Banks*, Ukraine's Law *On Amendments to the Tax Code of Ukraine on Improving the Regulatory Framework for the Insurance of Agricultural Products Supported by the State*, Ukraine's Law *On the Partial Guarantee Fund for Agricultural Loans*, as well as other initiatives that are important for the functioning of Ukraine's financial sector.

The updates to the regulatory landscape were not limited to making proposals to amend laws – the NBU substantially amended its own regulations. When amending these regulations, in 2021 the NBU conducted over 70 online meetings in order to comply with the relevant Ukrainian laws, and to enhance the transparency of its regulation of the nonbank financial sector. These events aimed to present the new approaches to regulation that underlie the NBU's revised set of regulations.



The most important regulations included: the Regulation *On Licensing and Registering Financial Services Providers and Requirements for Providing Financial Services*, the Rules *for Compiling and Filing Reports with the National Bank of Ukraine by Nonbank Financial Services Market Participants*, the Regulation *On the Disclosure of Information by Nonbank Financial Institutions*, the Regulation *On Informing Consumers about Consumer Lending Services by Financial Institutions*, and the Regulation *On Requirements for the Ownership Structure of Nonbank Financial Services Providers*.

In 2021, consistent and transparent communications remained the fundamental principle for shaping stakeholders' expectations. Therefore, the NBU proactively and regularly communicated with the nonbank financial market.

The NBU also continued to be involved in efforts to coordinate the implementation of the Strategy for Ukrainian Financial Sector Development until 2025. Among other things in 2021, the NBU held:

- a meeting of the Financial Development Committee that discussed the 2020 report on the implementation of Ukraine's Financial Sector Development Strategy until 2025 and approved revisions of this strategy made by the signatory institutions
- a consultative platform meeting that brought together stakeholders to discuss the results of the strategy's implementation in H1 2021, and to collect proposals to revise the strategy
- a workshop involving experts and representatives of academia and fintech companies to discuss fintech problems in Ukraine, and ways to resolve these problems through revising the Fintech Strategy
- a round table meeting entitled Strategic Development and Change Management in the Financial Sector. This online event convened central bankers and financial regulators from 22 countries.

Joint training events designed to boost the development of the financial services market were another aspect of the NBU's interaction with its partners in 2021. Among other things, these events were held in partnership with the Council of Europe project "Strengthening measures to counter money laundering and financing of terrorism in Ukraine," which is being implemented as part of the EU/CoE Partnership for Good Governance program

for 2019–2021. Both nonbank and bank financial institutions participated in the training events.

Together with the banking community, the NBU started developing a plan for the introduction and application of cloud technologies by banks.

In 2021, the NBU, together with market participants, launched a task force on developing the derivatives market and the secondary market for domestic government debt securities. The task force was drawn from representatives of the NBU, the Finance Ministry, the Settlement Center, the National Securities and Stock Market Commission, and the banking community.

Last year, NBU representatives also actively participated in more than 20 meetings of an international task force set up to implement a Memorandum of Understanding entered into by the Government of Ukraine, the EBRD, the American Chamber of Commerce in Ukraine, and USAID. The task force aimed to produce an optimum model for capital market and organized commodity market infrastructure.

What is more, the NBU held 14 meetings with the National Depository of Ukraine in order to deepen information exchange, and eight meetings with the Settlement Center on the new repos with risk control service.

Apart from engaging in task forces, the NBU also used other means to interact with stakeholders on a regular basis. With a view to ensuring long-term and all-encompassing interaction, in 2021, the NBU and the cyber police signed a Memorandum of Understanding on Cybersecurity and Cyber Protection. Among other things, the parties pledged to coordinate their actions if they identify cyber threats or cyber crimes in financial institutions.

The NBU remains a reliable partner for other government authorities in several targeted companies.

In August 2021, the NBU held an online meeting with banks on the practicalities of introducing one-time declarations. There were over 100 participants in the meeting, including representatives of the Parliamentary Committee on Finance, Tax and Customs Policy, the State Tax Service of Ukraine, and the banking community. The NBU,



together with representatives of other government authorities, held several additional meetings with bank managers to discuss the practicalities of introducing voluntary declarations.

The NBU also organized a joint event with the heads of Ukraine's Interior Ministry, Ukraine's Security Service, the Kyiv mayor, and the head of the Deposit Guarantee Fund. At the event, the participants signed a memorandum on finishing the construction of the Evrika, Patriotyka, and Patriotyka on the Lakes residential complexes, and handing the apartments in these complexes over to the investors.

A meeting with the banking community was an important milestone in the effective launch of the land market. During the meeting, experts from the NBU, the Presidential Office and the Ministry of Agrarian Policy, together with about 100 banking market participants, discussed current problems and ways to boost lending to farmers to enable them to purchase agricultural land plots.

The NBU conducted a large-scale campaign, the highlight of which was an event that marked the sixth anniversary of the launch of inflation targeting in Ukraine. The event was attended by representatives of the NBU's Council, the Ukrainian parliament, the Cabinet of Ministers, the National Securities and Stock Market Commission, and the business community.

Following a substantial extension of the NBU's mandate in 2020, in 2021, NBU representatives actively participated in developing several cross-institutional packages of law amendments.

Experts from the NBU, the Ministry of Digital Transformation and the National Securities and Stock Market Commission, together with MPs and the business community, held several meetings that focused on developing a reliable model for regulating the virtual asset market in Ukraine. The results of these meetings became the basis of Ukraine's Draft Law #3637 On Virtual Assets, which the Ukrainian parliament adopted on 8 September 2021.

The joint efforts of the NBU, the Ministry of Agrarian Policy, insurers and agricultural producers produced a policy and supporting documents that will ensure the productive use of insurance instruments in the activities of agricultural producers through partial

compensation of insurance payments from the state budget.

What is more, 2021 saw a boost in sustainable development initiatives. Among other things, the NBU

- started working together with the Corporate Social Responsibility Center (CSR Ukraine)
- started working together with the Association of Sustainable Development Experts (ASDE)
- initiated the NBU's participation in the UN Global Compact
- took part in the ESG Financial Forum held as part of the UN Global Compact, with a view to popularizing among stakeholders the NBU's actions to promote sustainable finance in Ukraine
- started working together with the United Nations Office in Ukraine by setting up a joint task force on sustainable development.

Development of NBU Statistical Products

In 2021, the further development of the financial sector statistics was ensured as well as the practical implementation of the international standards for compilation and dissemination of the monetary and financial statistics, statistics of financial resilience indicators based on bank's reports and NBU data, reports of insurance companies, credit unions, financial institutions, pawnshops, leasing companies, and other participants of the nonbank financial services market.

In accordance with the Regulation On Data Sets to be Disclosed in the Open Data Format approved by Resolution No. 835 of the Cabinet of Ministers of Ukraine dated 21 October 2015 (as amended), the NBU has launched the compiling of data and metadata sets of the financial sector statistics, performance indicators of banks and nonbank financial institutions and their publication on the unified state web portal of open data. At the same time, the Statistics section of the NBU official website now includes a list of indicators of nonbank financial institutions disclosed in a form of open data. We started to publish key performance indicators of insurance companies, credit unions, financial companies, pawnshops broken down by type of institution.

The NBU ensures the compliance with the Special Data Dissemination Standard (SDDS) for financial and external sector data in full. In order to ensure the accession of Ukraine to the extended Special Data Dissemination Standard (SDDS) Plus the NBU started to publish data and metadata on the page Special Data Dissemination Standard of the Statistics section for new categories of the financial sector data: Review of Other Financial Corporations, Debt Securities, Financial Resilience Indicators (the list in line with SDDS Plus), information on participation in the Coordinated Direct Investment Survey (CDIS) on an annual basis, in the Coordinated Portfolio Investment Survey (CPIS) on a semiannual basis, and in the Official Foreign Exchange Reserves (COFER) survey on a quarterly basis, in compliance with the SDDS Plus requirements.

In 2021, the NBU has improved the accounting methodology for foreign direct investment (FDI) in line with the international standards. From now on, the FDI external sector statistics includes the loans granted by nonresident sister companies. This FDI accounting approach covers more debt transactions within multinational corporations, more accurately determines the amount of investments, and better reflects the allocation of investments. Relevant retrospective revisions of the time series of external sector statistics have covered the period since 2015.

In addition, the list of public information was extended. In particular, we added a new item to the FDI statistics: detailed information on FDI income (by type of economic activities, country, and region). The NBU also has launched the publication of data on currency composition of the international investment position.

NBU's Strategic Communications

In 2021, all of our strategic communications continued to be focused on achieving three goals: strengthening trust in the NBU, maximizing the impact of regulatory policies on the behavior of target audiences, reducing economic uncertainty by providing the information necessary for these audiences to make well-considered decisions.

The role of anti-crisis communications also remained significant last year. While the major topics in 2021 were ongoing outbreaks of the pandemic and the explanation of their possible consequences, and situational reports

on the reforms in the financial sector, this function in early 2022 was adapted to wartime operations, focusing on explaining the NBU's operational decisions in wartime, and counteracting information propaganda from the aggressor state.

Strategic communications in 2021 continued to be managed through pandemic-adapted channels of communication and interaction with the media, via the remote work of employees, and through arranging meetings and events in compliance with anti-epidemiological safety rules – mainly in a remote format. Over 2021, we drafted and published a total of 838 press releases, and shared 26 interviews and 33 op-ed materials prepared by NBU speakers at the request of the media.

At the same time, an in-depth analysis of the communications function was carried out last year in order to enhance and further develop it. Aspects that required improvement in the light of current risks were identified. Regulations on communications were also brought in line with the updated Strategy of the NBU.

Improving the Regulatory Framework for Communications

The NBU in May 2021 presented a new institutional Strategy until 2025, which meets the challenges of today and contributes to the current development of the regulator of the financial sector of Ukraine. Since then, we have begun the process of updating the NBU's Communications Strategy, as well as working on the Regulation on Communications Policy Management, which allowed us to make the NBU's communications function more structured, and to implement mechanisms for overseeing all parties involved.

These two documents were approved by the NBU Board at the end of the year.

Internal Structuring and Strengthening of Individual Functions

Internal communications. The distribution of the units' functions also underwent change in terms of internal communications, which were transferred from the Personnel Department to the Communications Department. This made it possible, where necessary, to better synchronize internal communications with external ones, as well as introducing new



formats of communications between the NBU's management and its team, having acquired more effective tools to keep employees informed.

Social media. Another innovation was the separation out of the function of social media management. Simultaneously, an improved mechanism was introduced for posting communications materials on the NBU's official social media accounts and responding to readers' comments to provide answers from experts.

A new communications channel – the Telegram channel at t.me/nbu_ua called NBU | To Know. To Understand – was created and launched to cater to trends in information consumption by target audiences, as well as expanding the NBU's content distribution channels. The NBU's Instagram page was also rebooted.

Visual communications via the main social media channel, Facebook, were also expanded.

As part of the Facebook and Telegram upgrades and improvements to monetary policy communications, we implemented a separate format for providing information contained in the Inflation Report – a thematic series of videos with NBU experts dubbed "The Economy Made Easy."

The number of explanatory items grew in the following two communications areas:

- the protection of financial services consumers' rights, to feature legislation introduced in Ukraine in 2021 that regulates the behavior of debt collection companies and financial institutions in the settlement of overdue debts on consumer loans, as well as other documents governing the activities of nonbank financial institutions in the field of consumer protection
- nonbank financial market participants and their clients, to explain the changes that have occurred as a result of creating/ updating the legal framework for the nonbank sector.

These innovations in 2021 helped increase the number of subscribers to the NBU's official social media accounts to 61,900 on Facebook, 6,300 on Instagram, 16,800 on Twitter in Ukrainian and 769 on Twitter in English, and 1,522 on Telegram.

Analyzing and Counteracting Information Security Risks

The function of analyzing and counteracting information security risks was created to manage information warfare risks (relevant amendments were introduced to NBU Board Decision No. 261 dated 7 May 2018, in keeping with NBU Board Decision No. 402 dated 12 August 2021). Regular analysis of the information field to detect possible information attacks was initiated so as to prevent and counteract them.

To achieve these results, the following steps were performed:

- A daily procedure was adopted to quickly and efficiently identify information that may affect the NBU, its activities and effectiveness in achieving its strategic goals, and for the systematization of this information by areas of impact. During the reporting period, over 12,000 incidents were identified and analyzed, which are covered in 230 monitoring reports.
- A procedure was introduced and improved to provide regular analytical updates to the NBU's management on information security risks and threats to the NBU (the NBU in May 2021 started to assess its information risks and threats on a weekly basis; the results of the assessment are taken into account when the NBU's communications plan is being prepared).
- A procedure was adopted to assess potential critical situations and take measures to prevent them.
- A procedure was introduced to analyze information attacks on the NBU and its representatives, which involves the preparation of thematic documents with appropriate analysis and recommendations for the neutralization (counteracting) of such attacks.
- Anti-crisis messages were built into scheduled communications between the NBU, its speakers and the public.
- Separate public communications measures were planned for the NBU and its speakers in the interests of the neutralization of potential and currently existing negative topics.

Monitoring the Information Field

We raised the function of monitoring the information field to a new level, namely:



we automated the monitoring system, which became crucially important in 2022. Thus:

1) data from social media, the NBU's website and digital indicators for the mass media were integrated into the results of daily monitoring through:

- 100% automation of the collection of data on mentions of the NBU by the media, included an analysis of social media inputs
- improvements in the quality of monitoring by incorporating the main indicators of social media, the NBU's website, and digital indicators for mass media into daily reports
- the creation of dashboards with visualizations of social media indicators

2) the criteria for media field analysis were expanded, namely:

- The number of contacts with the target audience of the NBU was counted both in conventional media (online publications, print media, TV, radio) and in social media.
- The information field generated by the NBU's communications was assessed in terms of the NBU's objectives, communications tone and role, the level of mass media, and top speakers and sources of the NBU.
- Negatively toned information was categorized into three types: expert criticism (criticism of the NBU's activities by experts), targeted negativity (information campaigns to discredit the NBU and its representatives, information attacks, as well as information that appears to have been manipulated and is inaccurate), topics related to the NBU (topics that are not negative, but need attention because they could be a source of targeted negativity or expert criticism of the NBU).
- The threat-risk-negativity background scale was introduced to assess negatively toned information materials by topic.

The NBU's Website

The total audience of the NBU's website in 2021 reached a six-year high – the number of visitors per year was 5.6 million users, which is 1.5 times more than in 2020. Many significant events took place in 2021 that attracted this new audience. Moreover, since 2012, the share of users browsing the NBU's website from smartphones has increased, and the share of views from smartphones as of the end of 2021

exceeded the share of views from personal computers and laptops, and stood at 53%.

The Financial Markets section, which publishes updates on the financial and banking markets, including information on the official exchange rate of the hryvnia to foreign currencies, was the most popular, accounting for 45% of views.

The NBU's communications activity was also reflected in an increase in the number of news updates on the website in 2021 – their number increasing by 30% compared to the previous year. The majority of the updates on the website were news items about the work of nonbank financial institutions (32%), while reports on the protection of financial services consumers accounted for 12%, the share of posts on the national currency was 12%, and those dedicated to the release of commemorative coins accounted for 11%. News about the national currency of Ukraine, the hryvnia, was the most popular with users.

Stakeholder Communications: Transformation and Enhanced Efficiency

Early in June 2021, the stakeholder communications system was incorporated into the NBU Communications Department (the function was transferred from the Personnel Department). The transfer ushered in a stage of transformation and the enhanced efficiency of this functional unit.

The key achievements of the stakeholder communications system in 2021 (June through December 2021) were as follows:

- analysis of stakeholder communications channels, identification of prospects for their development, introduction of new, modern approaches to the formation of internal communications infrastructure, and the transformation of existing formats, the tone of communications, and improvements in the quality, information comprehensiveness, comprehensibility, and efficiency of stakeholder communications
- formation of a team for this function, along with a framework for its development
- development of a priority action plan and communication campaigns, programs, and projects for 2022
- establishment of cross-functional collaboration between the stakeholder communications



function and divisions within the NBU, followed by an increase in the number of requests for the development of communications campaigns and individual communications events

- proactive efforts to develop new data collection tools, improve existing ones, and deploy these to obtain statistics on the effectiveness of stakeholder communications
- development and implementation of new digital and electronic internal communications channels, and improvements to existing ones (the intranet portal, corporate e-mails, the NBU's weekly newsletters, feedback channels, surveys, etc.)
- support as an internal communications partner for all divisions at the NBU to keep employees updated: the implementation of more than seven joint comprehensive communications campaigns, along with projects and individual communications events
- development and implementation of new formats of communications between the NBU Governor and employees: annual meetings, regular vlogs on various topics
- proactive launch of new, comprehensive communications projects, namely a recently launched special communications project for the NBU's divisions called How It All Works
- internal surveys and feedback from employees, the use of statistical data collection tools that show positive dynamics, higher levels of awareness and increased involvement of the NBU's employees in communications.



Goal 11.

Digital transformation

IT Infrastructure Development

The NBU IT infrastructure has been developing using the best global practices for creating secure and reliable IT infrastructures.

Thus, the NBU continues the efforts on building a modern Data Processing Center (DPC) (implementation of the Construction the Main Data Processing Center project). The project aim is to establish a secure, fault-tolerant environment for operation of the NBU information systems, which are crucial for ensuring smooth operation of the Ukrainian banking system. The international Tier IV certificate for the project documentation of the new NBU DPC awarded in summer 2021 has become an important accomplishment on the way to achieving this goal.

The NBU information network is being updated and upgraded on ongoing basis. In 2021:

- a new communication channel between the NBU units located on Pukhivska St. and the NBU premises on Instytutska St. and Nauky Av. was established
- the local computer network for the State Treasury of Ukraine and the Central Vault was upgraded
- the possibilities of remote access for the NBU employees to the NBU information resources and systems were updated and expanded due to upgrading the system of virtual work stations and introducing an additional pool of virtual machines
- the software for operation of the NBU's private cloud storage was updated
- the NBU backup system was modernized
- the system of the NBU corporate e-mail was updated
- other efforts for improving the NBU IT infrastructure were implemented.

Functionality Automation: SEP Development and Preparing to ISO 20022 Implementation,

Further Development of the NBU BankID System. Modern Technologies: Transfer to Distributed Ledgers in Developing NBU's Information Systems

SEP Development and Preparing to ISO 20022 Implementation

In 2021, the NBU's System of Electronic Payments (SEP) continued to efficiently perform its functions as the nationwide system of electronic interbank settlements.

SEP has been operating 23/7 from August 2020. Under the Ukraine's Payment Infrastructure Development Based on ISO 20022 Standard project, the NBU has been preparing to implement the NBU's new-generation system of electronic payments (SEP 4.0) based on ISO 20022 international standard to be operated in 24/7 mode. It is expected to be launched on 20 August 2022 pursuant to NBU Board Resolution No. 93 On Implementation of ISO 20022 International Standard in Payment Infrastructure of Ukraine dated 16 September 2021.

Specifically, in October 2021 the SEP Council approved the ISO 20022 rules for messages exchange. At present, they are introduced at the SEP 4.0 stand.

The stand of a new-generation SEP 4.0 is accessible 24/7 since April 2021 and is used by the SEP participants for testing and checking its systems functionality at any convenient time. Four all-Ukrainian tests were held in 2021. They were held under individual testing programs and included the exchange of all kinds of financial and service messages in the ISO 20022 format.

The functional tests of interaction of all participants with a new-generation SEP are held on a continuous basis. This testing involves 71 banks of Ukraine, State Treasury Service of Ukraine, National Depository of Ukraine, and six developers of the automated banking systems.

Further Development of the NBU BankID System

The NBU BankID System, which was put into operation in December 2016, has been actively developed in 2021. It includes both the enlargement of a range of its participants and users and the automation of the system's functions, its technical re-equipment to ensure the system's reliable and uninterrupted functioning.

Modern Technologies: Transfer to Distributed Ledgers in Developing NBU's Information Systems

The NBU has continually studied the possibilities of applying the cutting-edge technologies to update the IT resources in terms of their protection and fault tolerance.

Thus, in 2021 the Decentralized Register of Nonresident Accounts was established using the BlockChain technology and put into operation. It enables the participating banks to perform the currency supervision over the foreign exchange transactions in UAH of their customers. In 2021, the participating banks were connected to the register, and their interaction was fine-tuned. The NBU will further approve the regulations to establish a procedure for banks to maintain and use the records in the register of accounts of the information system that ensures collection, accumulation, storage, access, and use by banks of the information on whether their customers' accounts have been opened for nonresidents.

Improvement of the Reporting Collection System

Last year the NBU continued the improvement of the reporting submitted to the NBU by market participants, which had been started in previous years. The updating of the statistical reporting system is aimed at its harmonization with the global standards and attaining the balance between the NBU needs in the receipt of a complete, timely, and accurate information, and the responders' reporting load.

The next stage started the year before on upgrading the reporting submitted to the NBU by the participants of the nonbank financial services market has been completed. The *Rules for Compiling and Submitting the Reporting by Participants of Nonbank*

Financial Services Market to the National Bank of Ukraine were approved by NBU Board Resolution No. 123 dated 25 November 2021 and enforced since

1 January 2022. The Rules set the requirements for the nonbank financial market participants regarding 1,400 reporting indicators in 50 reporting files. Specifically:

- insurers should submit 24 files
- insurance and/or reinsurance brokers (legal entities) – 4 files
- credit unions – 11 files
- pawnshops – 6 files
- finance companies – 16 files
- lessors – 8 files.

The format and procedure for submitting the reporting by the participants of the nonbank financial services market is harmonized with the uniform standard of submitting the reporting to the NBU.

In order to allow the sufficient time for the reporting submitters to bring their reporting systems and processes in line with the updated requirements, the NBU has notified the market participants in advance on approval of this regulation by publishing the respective information at the Statistical Reporting Organization page of the Statistics section in its official website. Also, the market participants were informed that the composition of the reporting to be submitted with the reporting date 1 January 2022 does not contain new indicators and shall be provided in volumes similar to those applied in 2021. The transition to a new reporting package pursuant to the requirements of the new regulation shall be completed during the following reporting periods of 2022: January 2022, Q1 2022.

In addition, according to the Regulation *On Requirements to Ownership Structure of Financial Services Providers* approved by NBU Board Resolution No. 30 dated 14 April 2021, three new reporting files on ownership structure of nonbank institutions were developed, which the market participants already started to submit.

To implement the EU law provisions and within the framework of the Reporting of Participants of Nonbank Financial Institutions Market project, the work on improvement of the market participants' reporting was launched, first of all

regarding the files and reporting indicators in line with Solvency I standard for the insurance companies.

Based on the findings of the annual reporting review, the draft amendment to the Rules of Organization of Statistical Reporting to Be Submitted to the National Bank of Ukraine approved by NBU Board Resolution No. 120 dated 13 November 2018 (as amended) was prepared for approving. This amendment is required for compliance with the Ukrainian laws and NBU regulations, improvement of the requirements to the reporting already submitted by the respondents, and enhancing the data quality. At the same time the process of the European legislative provisions implementation is under way, which provides for the development and introduction of new requirements for regulation of the bank activities. New indicators and files of statistical reporting, primarily on operational and interest risks of the banking book, are developed to control the compliance with those requirements. The innovations in the reporting also provide for introducing the reporting indicators compiled in accordance with the European COREP reporting standard, for supervision and regulation grounded on a modern information basis.

The NBU continued its cooperation with the banking community. In a format of the working group on implementation of the reporting under the European FINREP standard, the methodology on forming the reporting indicators according to the taxonomy of this standard was developed; it is based on the principle of the maximum use of the reporting that is already submitted to the NBU. It enables to reduce the reporting load on the respondents.

Besides, in 2021 the banks started to submit new reporting files on a minimum amount of the operational risk and calculation of a net stable financing ratio (NSFR).

In order to receive the necessary information for compiling and submitting by the NBU of the administrative reporting according to the requirements of Article 19 of Law of Ukraine *On the Prevention and Counteraction to Legalizing (Laundering) the Proceeds from Crime, Terrorism Financing, and Financing the Proliferation of Weapons of Mass Destruction* No. 361 dated 6 December 2019, draft amendments to the registers of the financial monitoring

indicators on the banks' risks assessment, interaction of nonbank institutions with the special authorized body, and customer transactions amounts were developed.

To control the compliance by the nonbank financial market participants with the requirements on implementation of personal sanctions imposed by decisions of the National Security and Defense Council of Ukraine on application, cancelation, and amendments to the personal sanctions, the draft of a new file to receive the respective data was developed.

Within the powers determined by the Law of Ukraine *On the National Bank of Ukraine* on control over the information security and cyberprotection, the draft of a new file to receive the information on offences committed in the payment services market and losses incurred both by the market participants and their customers was developed for the purposes of further analysis and mitigation of reputational and information security risks, and cyber risks.

The NBU continues to enhance the data quality of the NBU Credit Register (hereinafter – the Credit Register). To automate the control over the Credit Register information quality, the requirements to data validation in the current data model (JSON) were prepared, their external testing by banks was launched.

To improve the reporting data quality, during the year the requirements descriptions were amended, in particular on compiling the indicators for certain files of statistical reporting to be submitted to the NBU by banks and participants of the nonbank financial services market, as well as the reference books of the parameters values under the reporting files data. Taking into account the introduction of the NBU single identifier (NBU ID code), the access to the data source for the identifiers' reference values was updated at the Open Data page of the NBU official website.

Within the process of improving the structure of the requirements to the reporting compiling and submitting, a separate page of registers on financial monitoring indicators for the nonbank financial market participants was made in the Statistical Reporting Organization subsection of the Statistics section of the NBU official website.



Goal 12.

Best employer

Strengthening the attractiveness and recognizability of the employer's brand

In 2021, we continued to implement projects to develop and promote the employer's brand, under which a key role was given to working with young people.

The NBU took an active part in online and onsite job fairs for various target audiences. Numerous meetings were held with representatives of higher education institutions in Kyiv. During the year, training and internships were also organized for 82 students, eight of whom were hired by the NBU. The NBU, jointly with American Councils for International Education: ACTR/ACCELS, held a marathon of financial literacy for younger generations and a competition

of cases – the so-called case championship – for young people in Ukraine, the finalists of which were invited to internships at the NBU.

One of the key results of effective work with young people is the recognition of the NBU by international market representatives as an attractive employer. In particular, the NBU was among the 25 best employers open to young employees in Ukraine, according to STUDPOINT's 2021 ranking.

The most outstanding recognition in 2021 in terms of achieving the NBU's Best Employer strategic goal were results of an independent international survey of the employer's brand in Ukraine, conducted by Randstad Employer Brand Research, which showed the NBU to be the most attractive employer in the financial services sector.