

20 YEARS
OF CURRENCY
REFORM



Annual report 2016



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Address by the NBU Governor



Valeria Gontareva

After two years of stagnation, the Ukrainian economy finally returned to recovery in 2016. I believe the central bank was instrumental in helping Ukraine deliver strong growth in GDP of 2.3% yoy. To enable that growth, we focused on ensuring price and financial stability.

In 2016, after two years of crisis management mode, the NBU overhauled monetary policy to improve its effectiveness. A prudent and well-planned monetary policy was key in meeting the 12%±3 pp inflation target. In doing so, the NBU proved itself capable of fulfilling its mandate of delivering price stability. Inflation targeting is Ukraine's only feasible option under the current circumstances and the policy has been outlined in the Monetary Policy Guidelines for 2017 and the Mid-Term, approved by the NBU Council in December 2016.

Throughout 2016, the NBU gradually cut its key policy rate. However, the central bank found it difficult to cut the rate further in the second half of the year owing to heightened inflation and financial stability risks.

In 2016, the NBU also worked hard to fulfill its mission of delivering financial stability. To that end, the central bank carried out extensive stress tests of the 60 largest banks, which accounted for 98% of the market. The regulator also developed and introduced new approaches to assessing and regulating bank activity. Without a doubt, the PrivatBank bailout will go down in history as an important milestone. I am convinced that nationalizing Ukraine's largest savings bank was the right decision and one that helped protect the financial interests of over 20 million individuals and businesses.

I would like to specifically bring attention to the 20th anniversary of an event that holds great importance for Ukraine. Precisely 20 years ago, in 1996 Ukraine introduced its own currency, the hryvnia. The hryvnia has become not only an important element of our country's economic independence, but also a symbol of statehood. The work already done on currency reform offers a base from which we can continue working and executing projects in the development of the banking sector.

Last year, the NBU strived to bring its activity closer to European regulations and standards. The NBU also continued its internal transformation by rebuilding its functions, introducing project- and process-based approaches, and cutting expenses. Looking ahead, this will enable the NBU to successfully join the community of European central banks and the global financial community. The NBU's efforts to reform the banking system and transform

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the central bank into a modern institution are strongly supported by its international partners.

In 2016, the NBU Council resumed working after a long period of inactivity. I am convinced that our coordinated cooperation and communication will allow the NBU to reach the highest standards in performing its functions.

Throughout the year, the NBU remained committed to its institutional independence, which was legislated in 2015. Institutional independence means the central bank will not have to finance budgetary imbalances, will not be obstructed from dealing with shell and zombie banks, and will stick to a flexible exchange rate regime. Last year, the NBU continued working actively and transparently with government bodies and parliament.

Apart from delivering price stability and ensuring a smooth operation of the banking system, the NBU contributed to the country's economic growth through the UAH 35.5 billion in profit it allocated to budget revenues in 2016.

The NBU continued implementing the reforms that were launched back in 2014, which have delivered tangible results. I am proud that despite strong headwinds and constant pressure, I was able to carry out substantial reforms of the banking system. I am also confident that future generations will prosper from the quality changes we introduced.

I resign from the National Bank of Ukraine, leaving a legacy of an efficient European central bank and a healthy and transparent banking system.




The Year at a Glance

The year 2016 was a year of large-scale reforms and changes, building on the previous year's groundwork.

External conditions remained unfavorable and global risks grew. Nevertheless, economic indicators and banking sector trends offer reason for optimism.

In 2015, the National Bank of Ukraine was granted the mandate of ensuring price stability and financial stability, and it focused on implementing those key functions. Along with its primary function of ensuring cash circulation and operating NBU settlement systems, as well as the implementation of priority programs and projects within the Comprehensive Program of Ukrainian Financial Sector Development until 2020, our main achievements over the past year are outlined below.

1. The economic and political situation in the country remained complicated. However, we not only succeeded in stabilizing the situation but also laid the foundation for economic growth and for key economic indicators to return to optimal levels.
2. We developed a new monetary policy. The implementation of a modern and efficient decision-making system in monetary policy and forecasting enabled us to achieve inflation goals set by the NBU in 2016 within the inflation targeting regime. In 2016, actual year-end inflation came in at 12.4%, in-line with the target.
3. Over the course of the year, the NBU gradually cut its key policy rate from 22% to 14%. The easing of monetary policy created the conditions for a decrease in the value of money in the market, and therefore for an economic recovery.
4. Alongside the easing of monetary policy, the NBU gradually lifted foreign exchange restrictions that had been introduced at critical moments in 2014. Households, businesses, and foreign investors will soon be able to freely use their funds thanks to the broad FX liberalization.
5. Moreover, over the course of the year the NBU accumulated a cushion in terms of its financial security. During the year, the NBU's foreign exchange reserves grew 17% to USD 15.5 billion as of year-end.
6. In 2016, a large-scale stress-testing of the banking system was conducted. By the end of the year, over 98% of banking sector assets had been tested. Based on the results of the stress test, 21 of 60 tested banks had no need for additional capital, nine banks completed their three-year recapitalization plans based on the results of a diagnostic study ahead of time, four banks were removed from the market, and the remainder continued to recapitalize according to plan. In total for 2016, banks increased their capital as part of recapitalization programs by UAH 108 billion. Additional capitalization is a critical step towards strengthening the stability and reliability of the banking system.
7. The banking system reached 100% transparency. All controllers and owners of banks were identified. Ukrainians will now be able to make a more informed decision when choosing a banking institution.
8. To prevent and counteract future crises, a new system was implemented to assess financial stability and supervision. In the new framework, the frequency, depth, and intensity of banking supervision will depend on the level of a bank's systemic importance, its risks and possible impact on the stability of the entire banking system. In addition, the NBU began developing a new format of supervisory reporting based on the Uniform Bank Performance Report – UBPR.
9. In 2016, the NBU completed a diagnostic study of related party transactions. From now on, funding secured by banks will be used to lend to businesses instead of supporting companies that belong to a bank's shareholders.
10. In spite of the banking sector's largest ever loss in 2016 of UAH 159.4 billion, the sector is gradually trending towards recovery. Overall in 2016, 63 out of 96 solvent banks posted profit of an aggregate UAH 10.8 billion as of 1 January 2017. Losses were the result of additional provisioning after stress testing, with 80% of all provisions accumulated by one bank. This means that next year could mark the start of the recovery of profitable operations for the banking sector.

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11. Along with the completion of the active clean-up of the banking sector, trust in the banking system gradually returned. In 2016, customer deposits in solvent banks grew by UAH 117.6 billion (currency equivalent).
 12. Banknotes of the hryvnia, Ukraine's national currency which in 2016 celebrated the 20th anniversary of its introduction, remain among the most secure in the world. New security features are regularly introduced – Ukrainian flax fibers were recently added to banknotes. This made the banknotes more durable (by 5-10%) and brought down production costs.
 13. Cashless payments have become more popular in Ukraine. The share of cashless payments through payment cards grew by 5 percentage points compared with 2015. The share of domestic cashless payments using payment cards has grown from 8% in 2011 to over 35% in 2016. In 2016, total transactions with payment cards issued by Ukrainian banks surged 30.6% to approximately UAH 1,610 billion.
 14. The Cashless Economy, an unprecedented nationwide project aimed at promoting cashless payments in Ukraine, was launched in 2016.
 15. The National Bank of Ukraine, together with other authorities, put in significant effort to support the rapid implementation of e-government in Ukraine. The BankID system for identifying bank customers launched last year and provides administrative services from the government.
 16. Last year, the PROSTIR Ukrainian Payment Area national payment system underwent a series of important changes that helped its development. The PROSTIR trademark was registered, and contactless payment technologies and single issuer money transfers between payment cards were implemented. By the end of 2016, the total number of PROSTIR payment cards issued reached nearly 800,000.
 17. The NBU's internal transformation continues: the centralization of the regulator's functions, the optimization of support and non-core functions, the optimization of staff, process re-engineering, and more have helped generate total savings of UAH 7.3 billion on current and capital expenditures over 2014-2016.
 18. The NBU together with financial sector regulators and other stakeholders took an active part in updating the reforms roadmap of the Comprehensive Program of Ukrainian Financial Sector Development Until 2020. The updated document was approved by Decision No.28 of the Board of the NBU of 16 January 2017.
 19. The National Bank of Ukraine became the first institution awarded the HR Brand 2016 award in the area of Human Resources. The NBU won the award based on the case *The PERSONal Transformation of the NBU*, which described the central bank's internal transformation in light of changes in the HR department and HR function. This is evidence that real changes in the public sector are possible and that they are taking place right now.
 20. Integration into the European community of central banks is an integral part of the NBU's Vision. To that end, in 2016 the NBU organized its first international research conference and hosted the IMF-World Bank Constituency Meeting, a meeting of regional members of the IMF and World Bank (Ukraine is a member of both).

The currency reform of 1996: 20 years of the successful operation of the national currency, the hryvnia

In 2016, the National Bank of Ukraine (NBU) commemorated the 20th anniversary of the introduction of Ukraine's national currency, which has become part of our country's legacy.

In 1996, Ukraine launched a reform to replace the coupon-karbovanets with the hryvnia, the new Ukrainian currency.

The reform was a serious challenge for the young Ukrainian state and required great political, organizational, industrial, and methodological efforts.

The reform took place on 2-16 September 1996 and for that period, the old currency was allowed to continue circulating. In the first 15 days, both the hryvnia and the coupon-karbovanets circulated freely, with the latter being gradually withdrawn.

After 16 September 1996, the karbovanets was no longer accepted for any payments and the hryvnia became Ukraine's sole legal tender.

The currency reform was an incredibly important event for Ukraine and the hryvnia became an integral and essential part of the national identity. The hryvnia made Ukraine into a financially independent state and allowed the National Bank of Ukraine to implement an independent monetary policy aimed at the development of the Ukrainian economy.

Celebrations were held last September to mark the 20th anniversary of the currency reform. The event was attended by government officials, bankers, employees of the financial and business sectors, and academics – those who had been present

at the origins of Ukraine's statehood and the introduction of the hryvnia, those who currently work in the financial and banking fields, and those who will continue to work to strengthen and develop the Ukrainian currency. The event became a symbolic meeting of different generations of NBU employees, who had the opportunity to share views and memories.

Also to commemorate the anniversary, on 1 September 2016 the NBU introduced into circulation a commemorative coin of UAH 1 denomination with the inscription 20 Years of Currency Reform in Ukraine.

The UAH 1 coin is made of aluminum bronze and has a mintage of 60,000 coins. The obverse of the coin carries the inscription 1 HRYVNIA framed by an ancient ornament, while the reverse of the coin has a stylized composition: the 1 hryvnia coin against a background of 1 hryvnia banknotes. Designers: obverse – Volodymyr Demianenko, reverse: Volodymyr Taran, Oleksandr Kharuk, and Serhii Kharuk. Engravers: Volodymyr Demianenko, Anatolii Demianenko.

The National Bank of Ukraine is working diligently to enhance the Ukrainian national currency's prestige and to modernize and improve the currency. The regulator is also improving protective measures and is examining the national currency's digital future.

Over the course of 20 years, Ukraine's economy has changed, the needs of its citizens in terms of means of payment have changed, and the hryvnia itself has changed. The reforms conducted by the National Bank of Ukraine over the past two years enabled significant progress in the development of cash circulation, the payments system, attracting funds to the banking system, and in ensuring the financial stability of Ukraine.

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“The Ukrainian people are a part of ...
the European civilization not only through historical connections...
but through the very essence of their national
character”

Mykhailo Hrushevsky

02 STRATEGY AND REFORMS

02 Strategy and Reforms

Comprehensive Program of Ukrainian Financial
Sector Development Until 2020

Interaction Between the State and Public
Institutions

International Cooperation



*We are a modern, open, and independent central bank that enjoys the public's trust
and is integrated into the European community of national central banks*

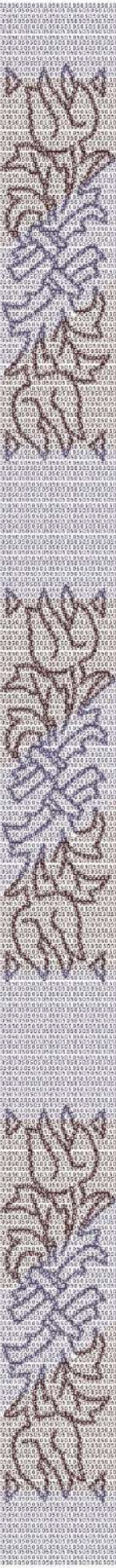
VISION

*To ensure price and financial stability with the goal of contributing
to Ukraine's sustainable economic development*

MISSION

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Comprehensive Program of Ukrainian Financial Sector Development Until 2020

The implementation of the Comprehensive Program of Ukrainian Financial Sector Development Until 2020 (hereinafter the Comprehensive Program) is proceeding on schedule. Over the reporting year, the NBU completed Stage I Resolving Past Problems and Cleaning Up the Financial Sector and launched Stage II Establishing Conditions for the Long-Term Sustainable Development of the Financial Sector.

To ensure transparency and efficiency, the NBU based the implementation of the Comprehensive Program on a project management approach. Over the reporting year, the NBU made progress in streamlining systemic communications and the coordination of financial reform projects owing to the efforts of the Financial Sector Reform Task Force.

While implementing the Comprehensive Program last year, the NBU worked closely with the Verkhovna Rada of Ukraine and the Parliamentary Committee on Financial Policy and Banking Activity in advocating the adoption

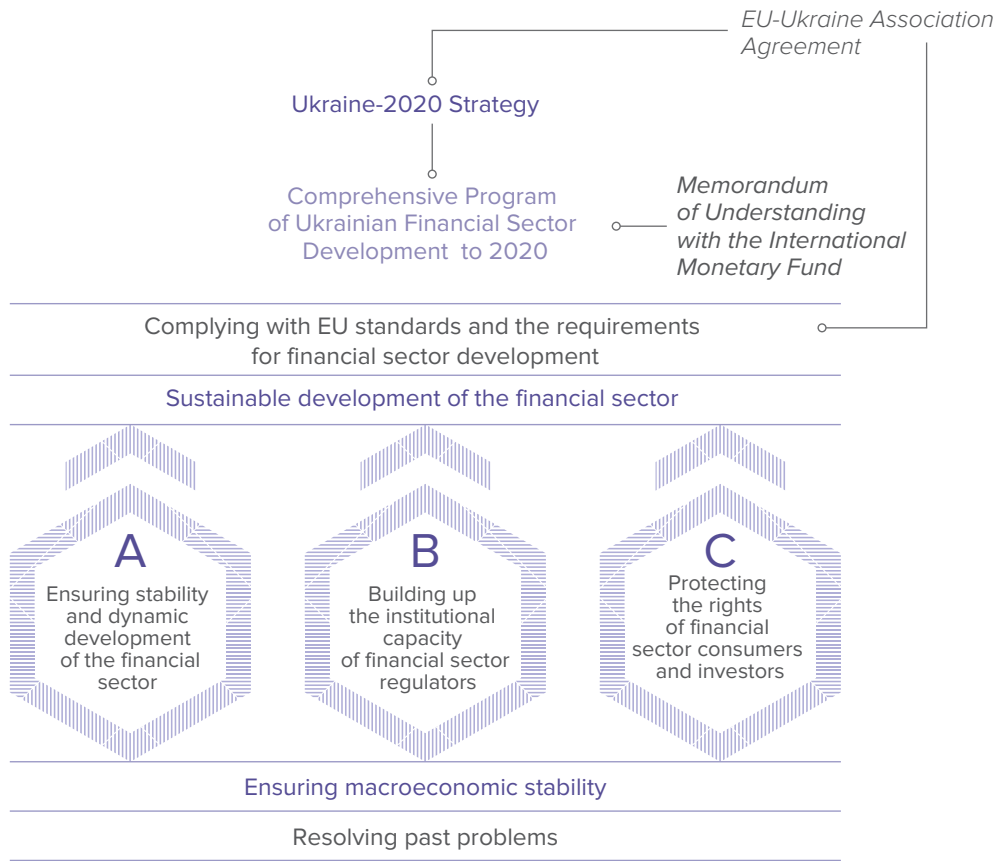
of critical legislation. With the support of the NBU, parliament held three plenary sessions devoted to the development of Ukraine's financial sector. In 2017, the NBU expects to work even closer with the Verkhovna Rada of Ukraine to expedite the implementation of legislative changes necessary for the timely implementation of financial sector reforms in Ukraine.

The implementation of the Comprehensive Program is scheduled to take place in three stages, each based on a clear and detailed action plan.

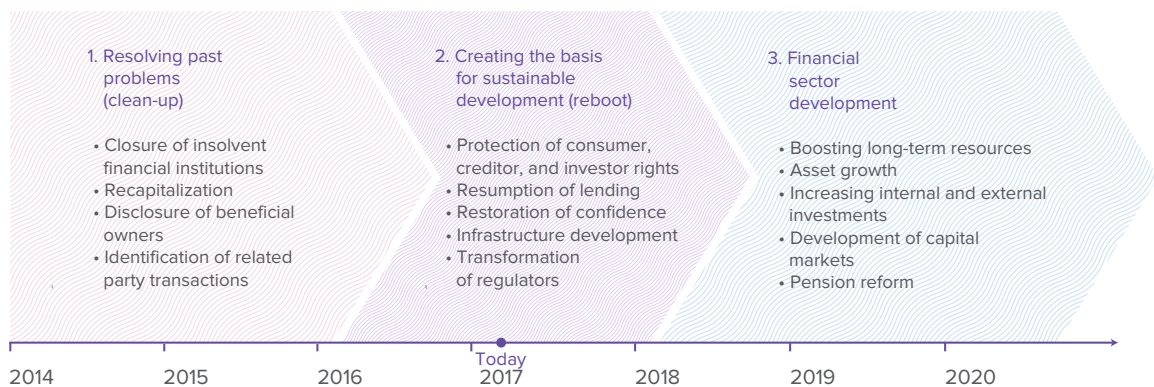
The Comprehensive Program focuses on three key areas:

- A. Ensuring financial stability and the dynamic development of the financial sector.
- B. Enhancing the institutional capacity of financial market regulators.
- C. The protection of the rights of financial sector consumers and investors.

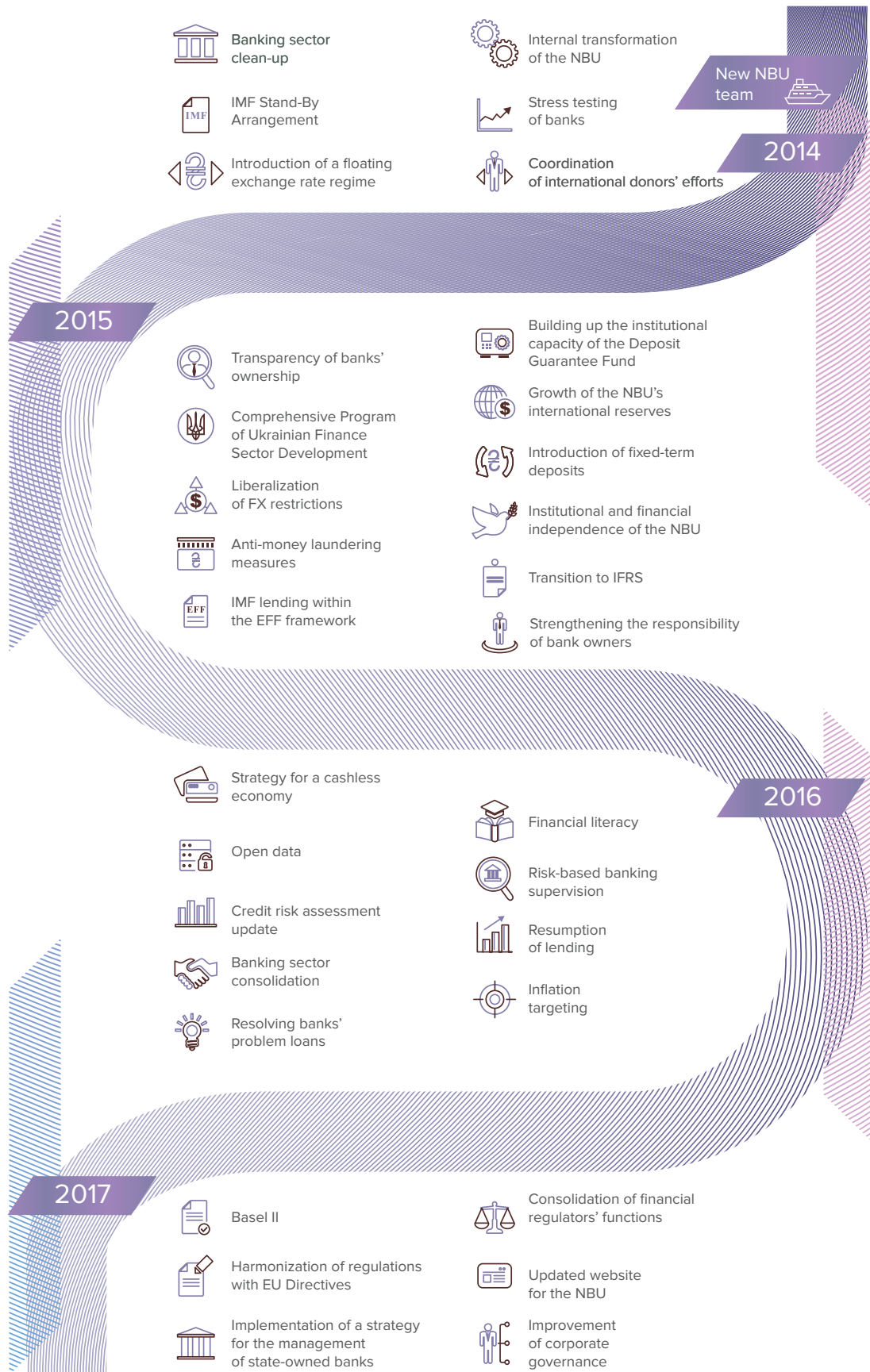
Comprehensive Program measures

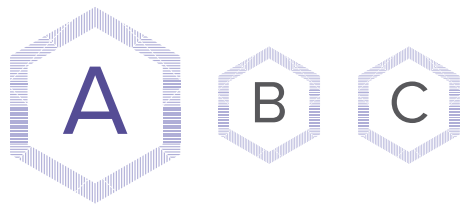


Stages of implementation of the Comprehensive Program



The reform of the financial system has clear and measurable target stages





Section “A” of the Comprehensive Program to ensure financial stability and the dynamic development of the financial sector focused primarily on:

- streamlining the system of prudential banking supervision
- ensuring the dynamic development of financial instruments and financial market infrastructure
- facilitating the free movement of capital
- enhancing operational transparency and the accountability of financial sector participants
- cleaning markets of problem assets and protecting investor rights.

Project to develop risk-based banking supervision

The NBU implemented a project to develop a risk-based approach to banking supervision, with the goal of reinforcing the prudential supervision of the banking sector. In 2016, the NBU developed a categorization for banks based on business models, and also harmonized estimates for a comprehensive process for the supervision of banks’ financial stability and compliance with prudential requirements. The process of adopting risk-based supervision will continue throughout 2017-2018, particularly in the following areas:

- development of a regulatory framework to safeguard the mandate of prudential supervision
- development and introduction of prudential requirements for banks, including in corporate governance

- analysis and evaluation of banks based on business models
- introduction of a new approach to off-site and on-site supervision and the activities of administrators.

The NBU completed a self-assessment of its banking supervision system’s compliance with the Basel Core Principles for Effective Banking Supervision. The self-assessment confirmed Ukraine’s legal framework and banking supervision practices are compliant with 29 Basel Principles. Building on the project’s results, the NBU developed a roadmap to 2019 and set out priorities on the path to implementing the Basel Core Principles for Effective Banking Supervision.

Project to Establish a Credit Registry at the National Bank of Ukraine

The NBU launched a project to establish a Credit Registry at the National Bank of Ukraine. In 2016, the NBU improved the requisite draft law. The establishment of the Credit Registry at the NBU will allow:

- an improvement of bank supervision instruments to reduce credit risk levels
- an improvement in banks’ operating security and the protection of depositor and bank creditor rights, and a consequent enhancement of the stability of the banking system
- the fulfillment of Ukraine’s commitments under the Memorandum of Economic and Financial Policies as part of the IMF’s Extended Fund Facility.

Cashless Economy Project

The NBU is working to further the development of non-cash transactions. To that end, the regulator has developed a substantial project to promote the cashless economy and established a roadmap to boosting the prevalence of cashless transactions in Ukraine. Success depends not only on the regulator, but also on other market participants: ministries and state agencies, commercial banks and businesses.

Foreign Exchange Liberalization

The NBU has developed and conceptualized a plan for the liberalization of foreign exchange functions. Under the plan, temporary and permanent FX restrictions will be lifted, as long as macroeconomic conditions allow it and the implementation roadmap is in place.

best practices from advanced economies to enable the development of a well-functioning exchange market.

Development of Draft Legislation on Foreign Currency

A law on foreign currency is being drafted jointly with EU experts. The provisions of the law will be fully in line with EU directives. The first draft law is scheduled to be presented in Q2 2017. The primary goal of the draft law is to harmonize Ukrainian legislation on FX regulation and control with a framework for the free movement of capital, in accordance with EU legislation.

Project to Adopt International Financial Reporting Standard (IFRS) 9

To enhance the operational and reporting transparency of financial sector participants, the NBU launched a project to introduce IFRS 9 requirements into the accounting and reporting practices of the NBU and Ukrainian banks. With the support of the “Big Four” audit and accounting firms, the NBU initiated the development of a new Chart of Accounts of Ukrainian banks.

Development of Capital Market Infrastructure

To ensure the dynamic development of capital market infrastructure, the following took place over the course of the reporting year:

- Launched cooperation between the NBU’s Depository and the Global Depository, which encourages Ukraine’s entry into global financial markets.
- The NBU’s Depository opened a correspondent account with the Global Depository to register securities held by Ukrainian deposit institutions and their clients. This work will be finalized over the course of 2017 and will enable recordkeeping for Ukraine’s foreign government borrowings in the domestic depository system.
- With the support of the EBRD, the project was launched to transform Ukraine’s capital markets settlement and clearing infrastructure. The project aims to adopt

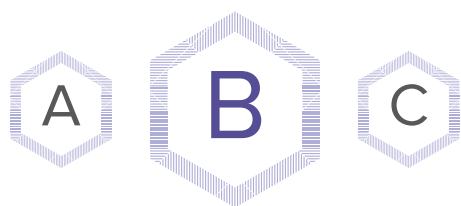
Project to Restore Lending in Ukraine

To restore lending in Ukraine, the NBU last year began structuring a project for the development of new terms and rules pertaining to the protection of creditor rights, resolving bad debts in the banking sector, and innovative financial mechanisms.

In 2016, the Verkhovna Rada of Ukraine adopted a number of laws essential to restoring lending:

- *On Bodies and Individuals Engaged in the Enforcement of Judicial Decisions and Decisions of Other Bodies* (No. 1403-VIII of 2 June 2016)
- *On Enforcement Proceedings* (No. 1404-VIII of 2 June 2016)
- *On Financial Restructuring* (No. 1414-VIII of 14 June 2016).

In 2017, the NBU and commercial banks must concentrate on restoring lending to the real sector and households. Banks are optimistic: according to a survey conducted by the NBU, more than 70% of financial institutions expect corporate loan portfolios will grow throughout 2017.



Section “B” of the Comprehensive Program is aimed at the development of the institutional capacity of financial market regulators. As part of this framework, the following measures were undertaken in 2016:

- improvement of institutional efficiency
- enhanced internal controls
- regulators’ transformation
- introduction of innovative IT technologies.

In an effort to strengthen coordination among financial sector regulators, the Financial Stability Board was established and began operating in 2015. In early May and December 2016, the Board published a report on its performance.

The NBU’s institutional efficiency was enhanced by:

- the successful implementation and development of project management as a centralized change management tool
- the continued liquidation of non-core assets and outsourcing of all non-core functions.

OpenData Project

To support transparency and professionalism the NBU in 2016 launched a project to introduce new data disclosure formats, as well as tools to control the reliability, relevance, and transparency of data (Open Data).

Based on the needs of the market (defined through questionnaires and focus group surveys in 2016), the NBU outlined priorities for disclosing data. As of early 2017, nearly all monetary and financial statistics have been available as real-time data on the NBU website via API in XML and JSON formats.

Data visualization, which will significantly simplify the use of data, will be introduced in the new version of the NBU website, slated for 2017.

BankID Project

The NBU has completed the first stage of the implementation of a single national system for online identification of individuals and enterprises (BankID) (hereinafter BankID System). In 2016, the number of system users grew to six banks and four platforms specializing in providing state administrative services, including the Single State Portal of Administrative Services and a portal of the Ministry of Justice of Ukraine. The BankID System enables banking clients to use bank cards for identification and to access state registers. During the second stage of the project (slated for 2017), the NBU will develop a process to allow the provision of banking services with the help of the BankID System.

ISO20022/IBAN Project

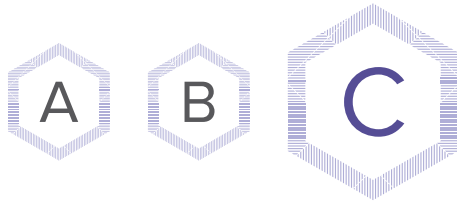
The NBU has also launched the ISO20022/IBAN Project to transition to a unified standard within Ukraine’s payment infrastructure. The project will facilitate the integration of the country’s payment infrastructure into international settlement systems.

Split Project

To introduce the Comprehensive Split Program, which involves the redistribution of the functions of the National Commission for the Regulation of Financial Services Markets between the National Bank of Ukraine and the National Securities and Stock Market Commission, the regulator prepared by:

- collecting data and analyzing the state of the non-bank financial sector
- evaluating Ukraine’s legal framework in the regulation of non-bank financial institutions in different market segments
- reviewing international practices on the regulation of the non-bank financial institutions market
- identifying the best regulatory operating model on the basis of a detailed strategy and having considered the redistribution of functions among regulators

- examining possible options for the organizational structure and operations
- jointly with international experts on technical assistance, starting to analyze Ukrainian legislation pertaining to the compliance of the regulation of non-bank institutions with EU legislation.



Within Section “C” of the Comprehensive Program, aimed at strengthening the protection of rights of financial service consumers and financial market investors, the following tasks in two key areas were accomplished:

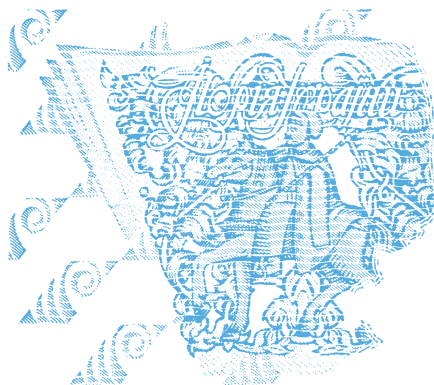
- improving financial literacy among

the population of Ukraine

- enhancing the protection of rights of financial service consumers and investors.

As part of the measures aimed at improving the financial literacy of Ukraine’s population, the NBU developed and adopted **the Plan to Enhance the Financial Literacy of Ukrainian Citizens**. In 2016, the NBU held two strategic sessions with major financial sector stakeholders to outline tasks and define an action plan.

In an effort to enhance the protection of rights of financial service consumers, the concept of an office of the financial ombudsman was developed and finalized with market participants and other major stakeholders. The office’s main task will be to enable the out-of-court resolution of disputes between financial services providers and consumers. The adoption of the Law of Ukraine *On Consumer Lending* (No. 1734-VIII of 15 November 2016) is seen as a key milestone in the development of an efficient system for the protection of consumer rights.



Update on the Comprehensive Program

The Comprehensive Program is a roadmap outlining financial sector reforms, but it is also a dynamic document. After almost two years of implementation, the time had come to update the document. Through the joint effort of all involved stakeholders, the document was reviewed and an updated version was approved by three financial sector regulators:

- NBU Board Decision No. 28 of 16 January 2017;
- Decision of the National Securities and Stock Market Commission No. 31 of 19 January 2017;
- Order of the National Commission for the Regulation of Financial Services Markets No. 219 of 7 February 2017.

The updated Comprehensive Program put a renewed focus on the measures that needed more attention on the policy front and activity on the part of regulators and market participants. At the same time, the overall structure of the Comprehensive Program remained unchanged: the reform process consists of three sections focused on ensuring financial stability, building the institutional capacity of regulators, and protecting the rights of financial services consumers and investors. During

the reporting year, financial sector regulators completed certain measures within the Program.

The updated Comprehensive Program focuses on three major areas of change:

1. Expanding the scope of the Comprehensive Program (new measures and actions).

The updated Comprehensive Program addresses of new challenges that emerged in 2015-2016 following the original Program's approval.

2. Cataloguing/consolidation/separation of the Comprehensive Program's measures.

The measures were restructured thanks to a better understanding of strategic areas within the Comprehensive Program. Certain projects within the Program became more detailed, while other projects were consolidated and separated from related measures. These changes allow for a clearer and more transparent structuring of project activities within the Program, taking into consideration their complexity, while enabling a more efficient organization and coordination of the activity of project leaders and stakeholders.

3. Revising the timeframe for the implementation of Program measures.

Interaction Between the State and Public Institutions

In 2016, the NBU continued a fruitful dialogue with government bodies, experts, lawmakers, and other stakeholders.

The NBU established a system of communication and coordination with state and public institutions during the implementation of the Comprehensive Program.

Thanks to the Task Force's work in introducing financial sector reforms, this professional platform consolidated efforts and helped develop a joint policy and approaches to financial sector reform, including all of its areas and sections, and involving all stakeholders: financial market regulators, representatives of the Ministry of Finance, the Deposit Guarantee Fund of Ukraine, the Office of the Financial Stability Committee of the Verkhovna Rada of Ukraine, professional associations, and businesses, as well as experts. Representatives of other ministries, government departments, and international organizations were also invited to participate in Task Force meetings on the implementation of financial sector reforms under certain projects and issues.

In 2016, the Financial Sector Reforms Task Force held 10 meetings focused on reviewing concepts of intra-agency projects for financial sector reform and related legislative initiatives.

As part of its cooperation with the Verkhovna Rada of Ukraine, the NBU continued to work actively to improve legislation. As was the case in 2015, the NBU also remained active in its cooperation with the Financial Policy and Banking Committee of the Verkhovna

Rada of Ukraine. In particular, the National Bank of Ukraine:

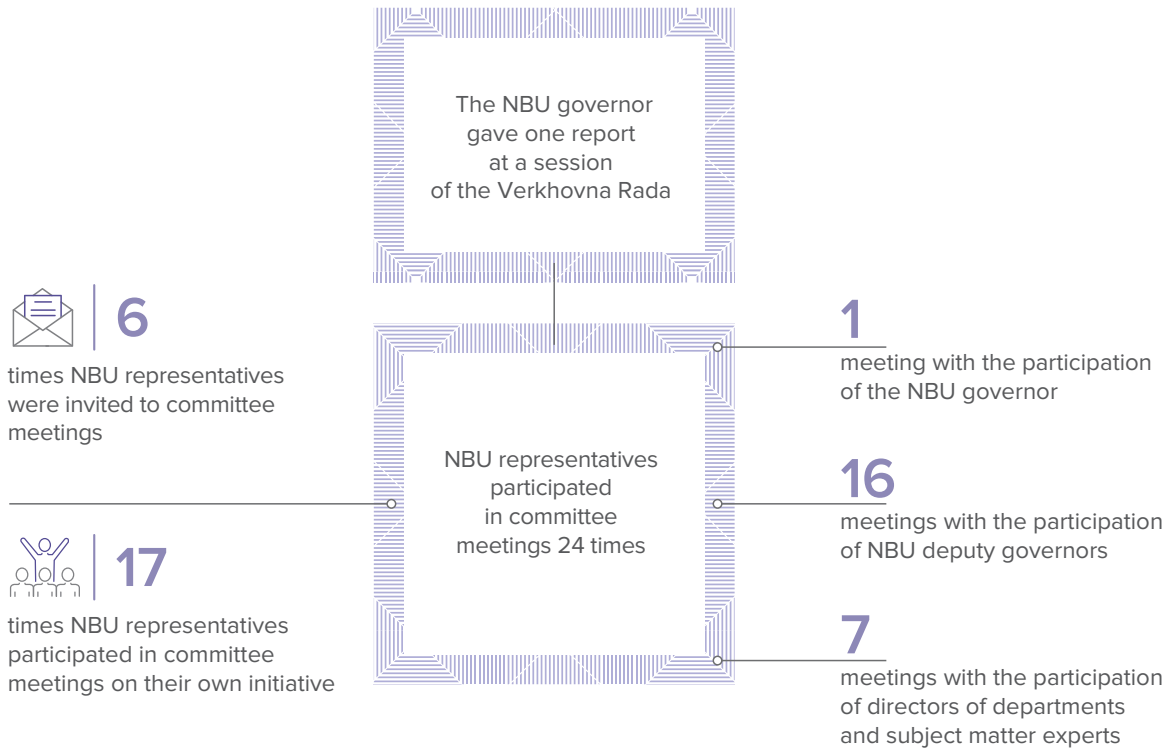
- worked with the Verkhovna Rada of Ukraine and its committees and members of parliament of Ukraine and their aides on issues that fall within the regulator's competence
- provided comments and suggestions for draft legislation
- provided explanations of NBU positions during the process of development of draft legislative bills in committees of the Verkhovna Rada of Ukraine
- prepared documents for the presentation and discussion of draft laws and other matters at meetings of Verkhovna Rada committees and during plenary sessions of the Verkhovna Rada.

In 2016, members of the Board of the NBU and directors of departments participated in 23 meetings of the parliamentary committee. In particular, the committee held 16 meetings with the deputy governor of the National Bank and seven meetings with directors of relevant regulatory departments. In addition, NBU Governor Valeria Gontareva attended one committee meeting.

NBU representatives were invited six times to a meeting of the Verkhovna Rada committee, and 17 times they participated in meetings on their own initiative.

On 5 February 2016, the NBU governor appeared in parliament to provide an overview of the NBU's actions in the foreign exchange market and to report on the status and prospects of the banking and financial sector as a whole.

Participation of NBU top management in the activity of the Verkhovna Rada of Ukraine



The parliamentary committee introduced “financial days” in parliament, when issues related to financial sector reforms were included in the daily agenda. The practice allowed the adoption of a number of important laws, including related to:

- Financial restructuring of businesses’ debts
- Consumer lending

- Indemnification of defrauded depositors of Bank Mykhailivskyi PJSC
- Cancellation of the 2% tax on foreign exchange transactions for individuals
- Enforcement proceedings and private agents for the enforcement of judgments.

In this way, we increased legislative support for financial sector reforms.

2016 results in terms of financial legislation

8 Draft laws adopted as a whole:

- State Budget of Ukraine for 2017
- on financial restructuring
- on consumer lending
- on deposit insurance in 100% state-owned banks
- on indemnification of defrauded depositors of Bank Mykhailivskiy PJSC
- on cancellation of the 2% tax on foreign exchange transactions
- on elimination of administrative restrictions on services exports
- on enforcement proceedings and private agents for the enforcement of judgments

6 Draft laws adopted in their first reading:

- on redistribution of functions of the National Commission for the Regulation of Financial Services Markets (Split)
- on regulated markets and derivatives
- on protection of financial consumers' rights
- on insurance
- on e-tickets for public transportation
- on liberalization of cash payments

3 Rejected draft laws:

- on boosting lending in Ukraine
- on protection of creditor rights
- on licensing for the provision of financial services

In addition to cooperation in the legislative area, the National Bank of Ukraine exchanges information on an ongoing basis with the Verkhovna Rada of Ukraine. The Legal Department sends weekly¹ information on regulations adopted and certified copies of resolutions of the Board of the NBU to be published in the legal framework section on the official website of Ukraine's parliament.

NBU resolutions are entered into the Single Regulatory Registry and published in the Official Gazette of Ukraine².

In 2016, the NBU sent to the Ministry of Justice and the Verkhovna Rada information about 158 NBU resolutions.

To coordinate its actions with the Ukrainian government, the NBU ensured an ongoing

dialogue through weekly meetings at the Cabinet of Ministers of Ukraine and in three government committees:

- The Governmental Committee on Economic, Financial, and Legal Policy, the Development of Fuel and Energy, Infrastructure, Defense, and Law Enforcement, chaired by First Vice Prime Minister of Ukraine Stepan Kubiv
- The Governmental Committee on European, Euro-Atlantic Integration, International Cooperation and Regional Development, chaired by Vice Prime Minister of Ukraine Ivanna Klymush-Tsintsadze
- The Governmental Committee on Social Policy and Humanitarian Development, chaired by Vice Prime Minister of Ukraine Pavlo Rozenko.

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YEARS OF CURRENCY REFORM

¹ According to the letter from the Verkhovna Rada of Ukraine No.19 / 6-161 of 11 July 2014

² According to Decree of the President of Ukraine No. 468/96 of 27 June 1996 On the Single State Regulatory Registry

International Cooperation

The NBU has expanded its dialog and cooperation with international partners, continuing on a path of integration with the European community of central banks and modernizing methods of regulating the banking system.

In 2016, the NBU continued to work actively with leading international financial institutions (International Monetary Fund, World Bank Group, Black Sea Trade and Development Bank, European Bank for Reconstruction and Development) as part of Ukraine's membership in those organizations and with the aim of developing and implementing programs and projects that facilitate the reform of the financial sector by the NBU and ensuring financial stability, in particular:

- The successful completion of the terms of the IMF Credit Facility Program under the EFF and achievement of the defined criteria and targets in reforming the banking sector and other sectors of the economy ensured the disbursement of the next tranche to Ukraine of SDR 0.7 billion.
- The NBU together with the World Bank successfully assessed the compliance of Ukraine's legal framework on banking supervision with the BCBS Core Principles for Effective Banking Supervision and EU legislative acts concerning capital requirements (CRD IV) and developed a roadmap to improve the quality of banking supervision in Ukraine.
- An agreement on a new project with the EBRD called Support for Financial Sector Reforms in Ukraine has been reached to launch and monitor the implementation of projects related to financial sector reforms.

In 2016, as part of Ukraine's membership in international financial institutions, NBU Governor Valeria Gontareva represented Ukraine in the Spring (April in Washington, USA) and Annual (October in Washington, USA) meetings of the IMF and World Bank, and the Annual Meeting of the EBRD Board of Governors (May in London, Great Britain).

In addition, the governor represented the central bank at the annual meeting of the World

Economic Forum (January in Davos, Switzerland), the 35th Meeting of the Central Bank Governors' Club of Central Asia, the Black Sea Region, and Balkan Countries (June in Almaty, Kazakhstan), and the 13th YES Annual Meeting (September in Kyiv, Ukraine).

In June 2016, on behalf of Ukraine, the NBU together with the Ministry of Finance hosted a meeting of regional member states of the IMF and World Bank. More than 70 top-level officials from 15 countries visited Ukraine, including central bank governors and ministers of finance and their deputies. The forum focused on key events from Europe, as well as further IMF and World Bank development.

In 2016, the National Bank of Ukraine deepened existing partnerships with central banks such as Narodowy Bank Polski, Sveriges Riksbank, De Nederlandsche Bank, Swiss National Bank, Bank of England, and others, and expanded bilateral communications within the context of international initiatives and priorities. The National Bank of Ukraine and the Central Bank of the Islamic Republic of Iran held a first workshop on banking cooperation. During the meeting, the central banks of Ukraine and Iran outlined potential areas of cooperation in the banking sector, including related to changes in the regime of international sanctions against Iran.

The NBU actively participated in the work of joint commissions, committees, and working groups on bilateral and international cooperation.

As part of its path to implementing the Association Agreement between Ukraine and the EU and bringing Ukraine's banking sector closer to EU regulation practices, the NBU:

- began systematic planning for the implementation of EU regulations
- tightened requirements for the analysis and appraisal of NBU regulatory initiatives with respect to their compliance with EU laws and international obligations in the area of European integration
- stepped up cooperation with international experts on European laws and advanced a dialog with the EU concerning regulation and the development of Ukraine's financial sector.

The NBU improved its approach to technical cooperation with international partners to increase the efficiency and effectiveness of joint initiatives and projects. The scale of international technical and expert assistance flowing to the NBU to achieve the objectives of Ukraine's and the NBU's strategic documents has grown. These strategic documents include.

- Association Agreement between the EU and Ukraine
- Comprehensive Program of Ukrainian Financial Sector Development Until 2020
- Monetary Policy Guidelines
- Memorandum of Economic and Financial Policies within joint programs with the IMF.

To maintain an effective dialog with international donors the NBU continued the activity that was started in 2014 in the coordination of technical assistance that has been provided to reform Ukraine's financial sector. In 2016, the NBU held workshops on a quarterly basis and high-level meetings every six months, in which the statuses of all current technical assistance projects were reported and future priority areas of cooperation were identified.

In order to deepen the dialog with European and international partners and share methods for improving the regulation of financial systems and tracking trends, the NBU held:

The 3rd Ukrainian Financial Forum under the auspices of the Vienna Initiative 2.0 (held in March) with the participation of representatives from IFIs, the European Commission, banks

of home and host countries, and Ukrainian banks. During the event, participants discussed issues related to problem loans and their restructuring, banking sector consolidation, and ways of boosting confidence in the banking system.

The 1st Annual International Research Conference on Transforming Central Banking

(held in May) organized in cooperation with Narodowy Bank Polski and with the support of the Government of Canada and the Kyiv School of Economics. The conference focused on the following key issues:

- the institutional transformation of central banks
- the relationship between monetary policy and financial stability,
- modern technologies, and capital flow management in an environment of financial globalization.

The conference was the first in a series of NBU research conferences; it brought together global experts on monetary policy development, professionals, and renowned academics to discuss current economic issues and issues related to central banking. Speakers at the conference included representatives of central banks, IFIs, leading academics, and subject matter experts.

The 3rd joint event with the ECB on Transition Processes in Monetary Policy, Macroprudential Analysis, and Banking Supervision

(held in December), the next in a series of meetings to discuss current issues related to central bank operations.

“Why speak where action is required”

Bohdan Khmelnytsky

03 Governance

03 GOVERNANCE

Address by the NBU Council Chairman

Council of the National Bank of Ukraine

The Board of the National Bank of Ukraine

Changes to the NBU's Organizational Structure

NBU Committees



We are focused on results, we strive for perfection, and we are creating a favorable environment for the development and sharing of new ideas
PROFESSIONALISM – a key value of the NBU

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YEARS OF CURRENCY REFORM



Address by the NBU Council Chairman



Bohdan Danylyshyn

As one of Ukraine's constitutional authorities, the NBU Council has a particular task – to draw up monetary policy guidelines. This makes the NBU Council the highest monetary authority in the country, one that is tasked with laying a solid foundation for smooth cooperation between the government and the NBU, which saw its mandate significantly broadened in 2015. The appointment of the NBU Council completed a key stage in changing the NBU as an institution, as set forth in the law on the NBU.

I am proud that over the two months of its operation, the NBU Council has not only accomplished most of its tasks for the next year, but also strengthened its institutional capacity. In particular, it developed and approved Monetary Policy Guidelines for 2017 and the Mid-Term; it approved the NBU's annual estimated expenses; it took a decision to send money to the state budget; it put in place controls over the execution of monetary policy; in October through December 2016, the Council held most of the meetings it was legally required to have over a year; it brought the NBU's Audit Committee into operation; and it established two NBU Council advisory bodies: the Public Panel and the Expert Advisory Board.

In 2016, the NBU met the main objective of its monetary policy by reducing headline inflation to 12.4% yoy, with the target being $12 \pm 3\%$. I believe the inflation targets set for 2017 and 2018 are achievable. First, the NBU has the government's support in seeking to meet these targets. And obviously, this is the key to success. Second, there is consensus among experts as to the set targets. All this inspires hope that the NBU is able to gradually revive price stability, thereby fulfilling its main constitutional function.

Ukraine needs a transparent, stable and predictable banking system, with clearly defined goals, and one that is result-oriented. In fact, the banking system is one of the key elements of a competitive, open and nationally-oriented economy. That is why the NBU Council also endorses those NBU board initiatives focused on improving the health of, and modernizing the banking system. In 2016, a great deal was achieved in that regard. The NBU dealt with many of the problems that had prevented the banking system from developing effectively. The central bank laid the foundations for the operation of a well-capitalized and liquid banking sector – a sector capable of resuming the function of an effective financial intermediary. This report contains details about the steps taken by the NBU Board. Overall, I believe the NBU Board is capable of meeting the NBU's second objective: safeguarding financial stability.

The time has come for the NBU to focus on meeting its third objective of promoting economic growth. Therefore, I believe the main task for banks in 2017 should be to revive lending. All the more so because the macroeconomic environment in which banks operate is getting better: GDP is rising, inflation has been curbed, the state budget deficit has been cut markedly, and the balance of payments is improving. Incidentally, the NBU Council contributed to that by providing Monetary Policy Guidelines, which already today underpin monetary policy. The expected faster economic growth will have a positive effect on the number of solvent borrowers and prosperous bank customers.

The NBU Council is fully aware of the challenges the country's economy is facing, including those faced by the financial and banking sector. That is why the NBU Council is fruitfully cooperating with the NBU Board and the scientific and expert community, including professional banking associations. The NBU Council seeks to hear and is listening to market players' opinions on the operation of the banking system, and the influence the NBU's and the Council's decisions have on the banking system.

Today, society, the NBU, the NBU Council and the scientific community have before them extremely difficult tasks. The key task is to restore confidence. I am convinced that accomplishing this task will improve the performance not only of the NBU and the NBU Council but also of other institutions. Getting this done requires dedicated and well-coordinated efforts taken jointly by the Ukrainian government, the NBU, and parliament. For its part, the NBU Council pledges to, step-by-step, search for solutions to establish constructive cooperation and to put the economy back on the path to growth.

Council of the National Bank of Ukraine

After a year-long interruption, the new NBU Council began operating once again. In accordance with the Law of Ukraine *On the National Bank of Ukraine*, the council's mandate has been broadened and its institutional framework strengthened.

The NBU Council's main tasks are to develop Monetary Policy Guidelines and oversee the implementation of monetary policy. In addition, the NBU Council is tasked with overseeing the NBU's internal control system.

In accordance with the Law of Ukraine *On the National Bank of Ukraine*, the NBU Council has the following key powers and authorities:

- to develop Monetary Policy Guidelines and analyze their influence on the country's development
- to exercise control over monetary policy implementation
- to approve the NBU's expenditure budget
- to approve the financial statements of the NBU
- to define the amount of NBU profit to be transferred to the State Budget of Ukraine
- to establish the Audit Committee of the NBU
- to appoint the Head of Internal Audit
- to appoint NBU deputy governors
- to approve the methodology for setting salaries for the governor, his/her deputies, and members of the NBU Council.

The NBU Council is comprised of nine members:

- the Verkhovna Rada of Ukraine appoints four members
- the President of Ukraine appoints another four members
- the NBU governor is included by virtue of his/her position.

In 2016, the NBU Council consisted of seven members, four appointed by the Parliament and two by the President of Ukraine.



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Composition of the NBU Council



Bohdan Danylyshyn

Chairman of the NBU Council

Decision of the NBU Council of 25 October 2016, appointed for a seven-year tenure by Presidential Decree No. 470/2016 of 25 October 2016.



Tymofiy Mylovanov

Deputy Chairman of the NBU Council

Decision of the NBU Council of 25 October 2016, appointed for a five-year tenure by Resolution No. 1440VIII of the Verkhovna Rada of Ukraine of 7 July 2016.



Valeria Gontareva

Member of the NBU Council as NBU governor.

**Viktor Koziuk**

Appointed for a seven-year tenure by Resolution No. 1440-VIII of the Verkhovna Rada of Ukraine of 7 July 2016.

**Vira Rychakivska**

Appointed for a four-year tenure by Resolution No. 1440-VIII of the Verkhovna Rada of Ukraine of 7 July 2016.

**Vasyl Furman**

Appointed for a six-year tenure by Decree No. 470/2016 of the President of Ukraine of 24 October 2016.

**Olena Scherbakova**

Appointed for a six-year tenure by Resolution No. 1440-VIII of the Verkhovna Rada of Ukraine of 7 July 2016.

Within just two months of 2016, the NBU Council held five meetings, or half of the required minimum of 10 meetings during a year. The supervisory body's key achievements include:

- approval of the Annual Consolidated Financial Statements of the NBU for 2015, allocation of the central bank's profit, and the decision to transfer UAH 38.2 billion to the State Budget of Ukraine
- approval of regulatory proceedings of the NBU Council
- the establishment of operating bodies of the NBU Council (the Audit Committee, the Public Panel, and the Expert Advisory Board of the NBU Council) and the approval of their bylaws and composition
- approval of the methodology for calculating remuneration for NBU Council members aside from the NBU Governor, as well as methodology for calculating remuneration for the NBU governor and his/her deputies
- approval of the management of the NBU Council and NBU deputy governors
- drafting and approval of the Monetary Policy Guidelines for 2017 and the Mid-Term based on the recommendations of the NBU Board. The NBU Council established price stability as the primary goal of the monetary policy. This means the priority task for the NBU Board is to reduce inflation (CPI) to single digits and maintain that level over the medium term. This decision by the NBU Council formally established inflation targeting in Ukraine, to ensure the future consistency of monetary policy based on inflation targeting principles as declared by the NBU Board in August 2015
- approval of the NBU Council Action Plan for 2017.



The Board of the National Bank of Ukraine



Valeria Gontareva

Governor of the National Bank of Ukraine

Governor of the National Bank of Ukraine since June 2014.

Head of the NBU Monetary Policy Committee, head of the NBU Financial Stability Committee, head of the NBU Assets and Liabilities Management Committee, chairperson of the board of the NBU's Corporate Non-State Pension Fund.

Governor of the International Monetary Fund for Ukraine, co-chair of the Financial Stability Board, chairperson of the Supervisory Board of the German-Ukrainian Fund.

She has over 20 years of experience in management positions at leading Ukrainian and international financial institutions. Before her appointment as NBU governor, she was head of the Investment Board and later managing director at Investment Capital Ukraine Asset Management Company, LLC.

She also held various positions at ING Bank Ukraine JSC, from head of Resource Management to first deputy board chair. At Société Générale Ukraine JSC she was head of the Resource Management Division and later head of the Resource Management Department. She has also worked at the Ukrainian Interbank Currency Exchange.

Valeria Gontareva graduated from the Kyiv Polytechnic Institute with a major in Optical Electronic Instrument Engineering and holds a degree in International Economics from the Kyiv National Economic University.

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Yakiv Smolii

First Deputy Governor
of the NBU

First Deputy Governor of the NBU since October 2016. Before that, Yakiv Smolii was deputy governor of the National Bank of Ukraine since April 2014. A member of the NBU Board since April 2014.

His areas of management include operations, payments, and control over cash circulation.

Head of the NBU Committee on Banking Supervision and Regulation and Oversight over Payment Systems, head of the NBU Operational Risks and Business Continuity Management Committee, head of the NBU Change Management Committee.

Yakiv Smolii has been working in Ukraine's banking system for more than 25 years, since its formation. In 1991-1994 he worked at the NBU's Regional Branch in Ternopil oblast. Until 2005 he was deputy chairman of the board at postal and pension bank Aval JSC. From 2005 until 2014 he was the director of banking at Prestige-Group.

He graduated from the Ivan Franko Lviv National University with a degree in Mathematics and a major in Applied Mathematics. He holds a PhD in Economics.



Dmytro Sologub

Deputy Governor
of the NBU

Deputy Governor of the NBU since March 2015.

Areas under his management include monetary policy, macroprudential policy to ensure financial stability, economic analysis, collection and analysis of statistics and reporting, and research.

Before joining the NBU, Dmytro Sologub built his career in economic analysis and research, starting in 2002 as research associate at the Institute for Economic Research and Policy Consulting (IER) first in the State Finance Division and later in the Macroeconomic Analysis Division. In 2004-2007, he worked as a research economist at the International Monetary Fund's resident representative office in Ukraine. In 2007-2015, prior to joining the NBU, he was head of analysis and research at Raiffeisen Bank Aval PJSC.

Dmytro Sologub graduated from the Belarus National University with a degree in Economics, majoring in Theoretical Economics. Later he completed a Master's in Economics (EERC) at the National University of Kyiv-Mohyla Academy. He is a CFA charterholder.

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YEARS OF CURRENCY REFORM



Oleg Churiy

Deputy Governor
of the NBU

Deputy Governor of the NBU since June 2015. Before that, he was the director of the Open Market Operations Department at the National Bank of Ukraine.

Areas under his management include open market operations for monetary policy implementation, foreign exchange regulation, and the management of the NBU Depository where government and municipal securities are housed.

Oleg Churiy has worked in Ukraine's financial sector since 1993 when he started his career as an operator in the International Payments Department and continued as economist in the Interbank Foreign Exchange Market Operations Department at INKO Bank JSC. After that, he worked at Va-bank JSC, Spivdruzhnist Investment Company, and BNP-Dresdner Bank Ukraine JSCB. In 1999-2007, he worked as chief treasury dealer and later as head of treasury at Bank Austria Creditanstalt Ukraine JSC (in 2002, the bank changed its name to Hypovereinsbank Ukraine JSC). For the next three years, he was acting head of the Investment Department and later head of the Investment Business Office at Ukrsibbank JSCIB. Between 2010 and 2014, he was head of fixed income transactions at the Investment Department of VTB Bank PJSC.

Oleg Churiy completed a degree in Economics and Bank Management at the Higher Banking School of the International Centre for Market Relations and Entrepreneurship of the Market Centre where he majored in Finances and Credit. He is a CFA charterholder.



Kateryna Rozhkova

Deputy Governor
of the NBU

Deputy Governor of the NBU since 25 October 2016. Before that, she was acting deputy governor of the NBU from 18 January 2016. A member of the NBU Board since 18 January 2016.

Kateryna Rozhkova is in charge of prudential supervision.

Head of the NBU Commission on Bank Related Parties and Transactions with Related Parties. Deputy head of the NBU Committee on Banking Supervision and Regulation and Oversight over Payments Systems.

Kateryna Rozhkova has been working in Ukraine's banking system since 1998. From 1998 to 2005, she worked at postal and pension bank Aval JSC where she started as an economist and later became director of the Financial Department. In 2006-2008, she was deputy head of the board, board member, and advisor to the head of the board of ErsteBank PJSC. In 2009, she worked as director of the NBU's Off-Site Supervision Department for half a year. From 2010 to June 2015, she was deputy chair of the board at Finbank PJSC and later acting chair of the board at Platinum Bank PJSC. Between 10 June 2015 and 18 January 2016, she held the position of director of the Banking Supervision Department at the NBU.

Kateryna Rozhkova graduated from the Kyiv National Economic University where she majored in Finances and Credit – Bank Management and completed a Master's of Business Administration. She also graduated from the International Institute of Management (MIM-Kyiv) with a specialist degree in International Business.

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YEARS OF CURRENCY REFORM

**Roman Borysenko**

Deputy Governor
of the NBU

Deputy Governor of the NBU since October 2016. Prior to that, he was acting deputy governor of the NBU from August 2016. A member of the NBU Board since October 2016. Roman Borysenko was a member of the NBU Board while working as director of the Personnel Department from December 2014 to July 2015.

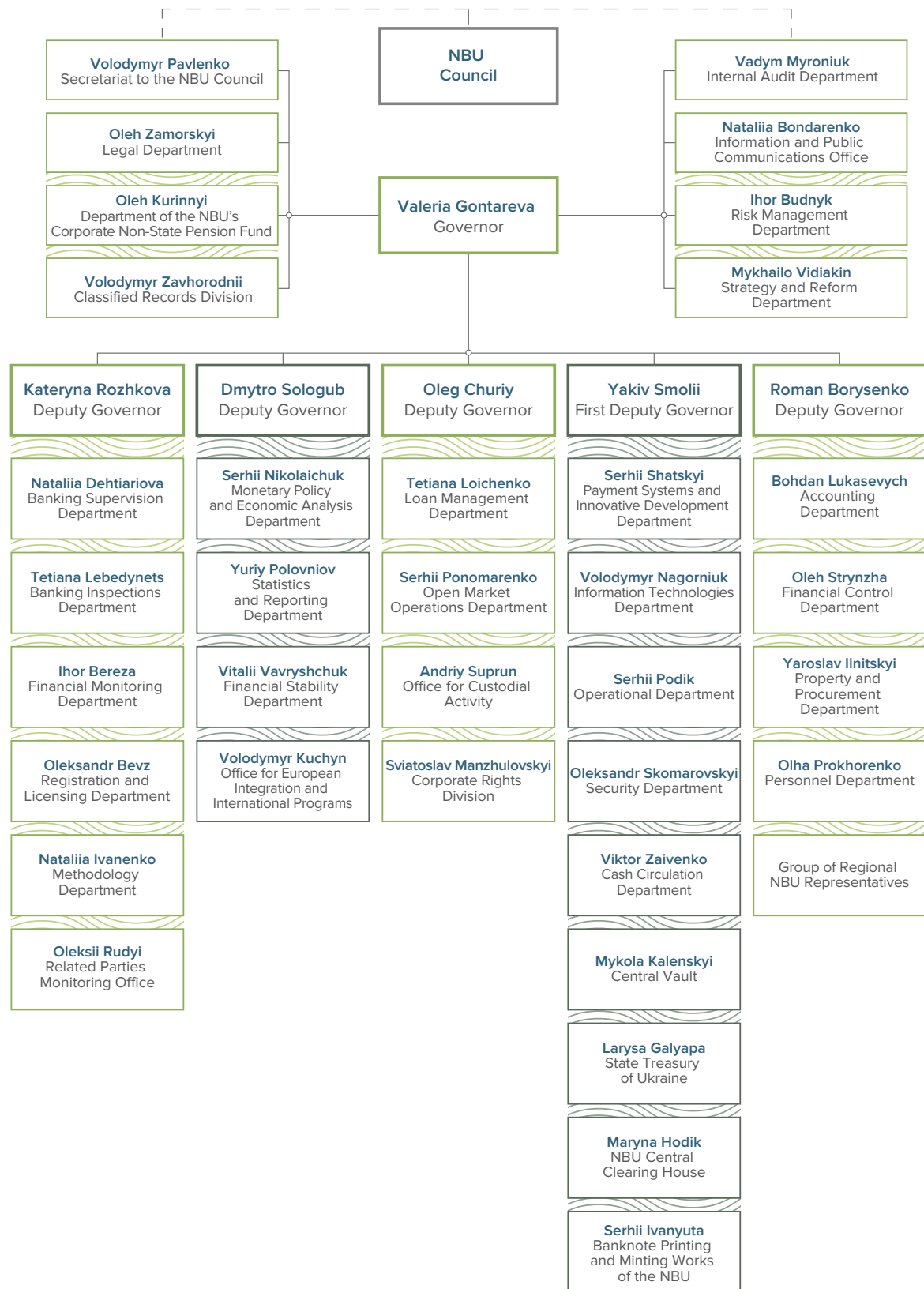
Areas under his management include finances, human resources, and management of property and procurement for the National Bank of Ukraine.

Head of the Budget Committee of the National Bank of Ukraine, head of the Tender Committee of the National Bank of Ukraine.

Roman Borysenko has worked in Ukraine's banking system for more than 20 years. From 2001 to 2014 he worked at Raiffeisen Bank Aval where he started his career as an economist and reached the position of deputy director – head of human resources.

Roman Borysenko graduated from the Ukrainian Banking Academy of the National Bank of Ukraine in Sumy where he majored in Banking and completed a degree in Economics.

Organizational Chart of the National Bank of Ukraine³



³As at 01 January 2017

Changes to the NBU's Organizational Structure

Changes to the Board of the National Bank of Ukraine

The Board of the National Bank of Ukraine underwent a series of personnel changes in 2016.

On 18 January 2016, Kateryna Rozhkova was appointed acting deputy governor of the NBU. She was put in charge of prudential supervision, previously led by Oleksandr Pysaruk, former first deputy governor of the NBU. He left the position on 31 December 2015 as he returned to his work internationally with the International Monetary Fund. After his resignation, Yakiv Smolii became acting first deputy governor of the National Bank of Ukraine.

On 1 August 2016, Vladyslav Rashkovan completed his term as deputy governor, a position he held since November 2014.

On 25 August 2016, after an open search for candidates for the position of deputy governor, Roman Borysenko was appointed acting deputy governor in charge of financial and administrative matters. From August 2014 until the appointment, Roman Borysenko served as director of the Personnel Department of the National Bank of Ukraine. From December 2014 to July 2015, he was a member of the NBU Board.

On 25 October 2016, the NBU Council at its first meeting appointed: Yakiv Smolii as first deputy governor and Kateryna Rozhkova and Roman Borysenko as deputy governors of the National Bank of Ukraine.

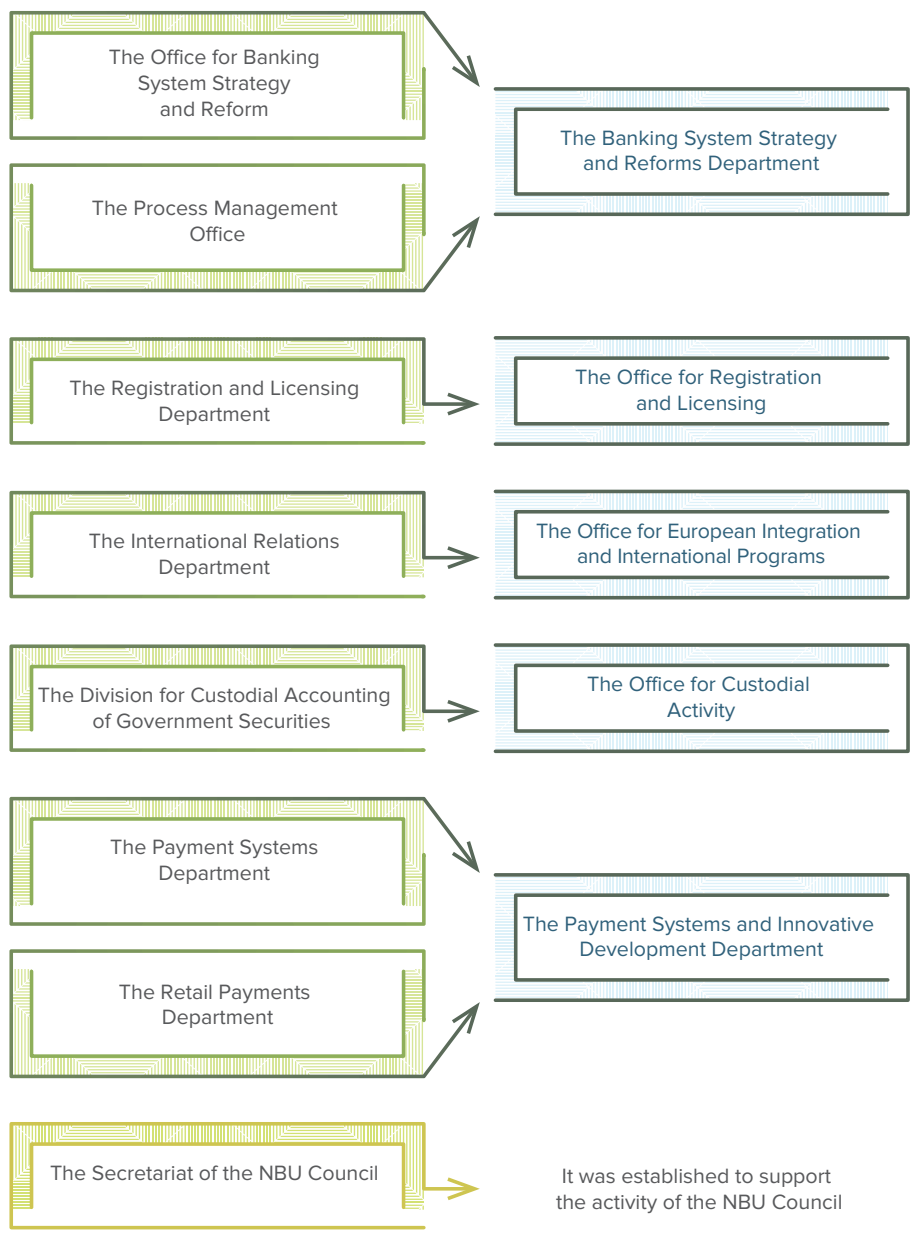
Changes to the NBU's Organizational Structure and Management

In 2016, as part of the regulator's continued transformation, the NBU changed its organizational structure and management.

- The Office for Banking System Strategy and Reform and the Process Management Office were reorganized into the Banking System Strategy and Reforms Department and subordinated to the NBU governor. Mykhailo Vidiakin was named the department's director.
- The International Relations Department was reorganized into the Office for European Integration and International Programs, which entered the monetary stability area of responsibility headed by NBU Deputy Governor Dmytro Sologub. Volodymyr Kuchyn was appointed to head the office.
- The Registration and Licensing Department was reorganized into the Office for Registration and Licensing, a separate unit of the NBU. Oleksandr Bezv retained his position as head of the office.
- The Personnel Department headed by Olha Prokhorenko became a part of the financial and management area of responsibility.
- Serhii Ivanyuta, previously an advisor to the general director of the NBU Printing and Minting Works, was named the general director of the NBU Printing and Minting Works.

- Mykola Kalenskyi, previously the head of the NBU Regional Office in Kyiv and Kyiv Oblast, was appointed director for the NBU's Central Vault.
- Nataliia Dehtiarivna was appointed as director of the Banking Supervision Department. She joined the NBU after working as a top manager in the banking sector.
- The Payment Systems Department and Retail Payments Department were reorganized into the Payment Systems and Innovative Development Department. Serhii Shatskyi was named the department's director.
- The Division for Custodial Accounting of Government Securities was reorganized into the Office for Custodial Activity headed by Andrii Suprun.
- To support the activity of the NBU Council, the Secretariat of the NBU Council was established. Volodymyr Pavlenko was brought on to head up the Secretariat to the NBU Council.

Organizational Changes at the NBU in 2016



Top Management

The NBU's top managers have a wealth of experience working at Ukrainian and foreign banks. The team at the NBU is reforming the banking sector based on their exposure to best global practices.

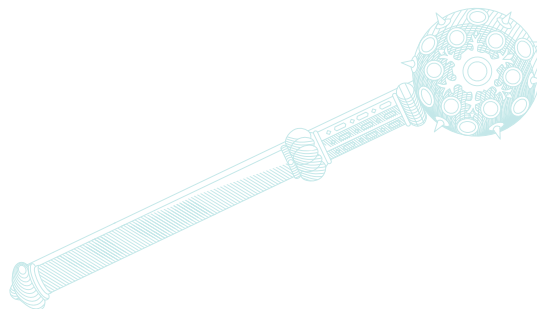
The average age of the NBU's top managers is 44.5 years.

In 2016, three new top managers (9%) joined to replace departmental directors that left the NBU. In 2015, the replacement rate was 10 managers (29%).

The average length of service at the NBU of top management is 6.5 years.

Length of Service for NBU Top Managers

Number of top managers	Work experience
2	20 – 25 years
9	10 – 20 years
4	3 – 8 years
8	2 years
12	one year or less



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YEARS OF CURRENCY REFORM

NBU Committees

In 2015, the NBU Board exercised its legal right to delegate some of its powers and authorities to special committees. Thanks to this shift, the NBU adopted a new decision-making approach based on collective committee decisions.

The well-coordinated work of the NBU Board's committees helps entrench reforms and ensures the transparency of the NBU's activities. The results of 2016 show the new system enabled an improvement in the quality of decision-making inputs and increased the efficiency of the NBU Board's activity. The workload was successfully distributed between the NBU Board and the committees, creating the conditions for a cross-functional exchange of data and a meaningful discussion with the involvement of all parties before proposals are submitted to the NBU Board for consideration.

In 2016, the focus was on:

- supporting the policy of transparent activity and boosting the quality of committees' decisions
- establishing and improving cooperation between committees
- creating a consistent approach to the work of the committees.

In addition, the NBU Board in 2016 established the Tender Committee to conduct procurement for the regulator, in accordance with the Law of Ukraine *On Public Procurement*.

At present, the NBU Board has ten special committees.

The structure of the committees covers all key activities of the NBU that require collective decisions.

The committees fall under three main groups:

1. Policymaking.
2. Policy implementation.
3. Policy support.

Structure of the NBU's Committees



Committees are established based on a clear separation of functions and the participation of NBU Board Members.

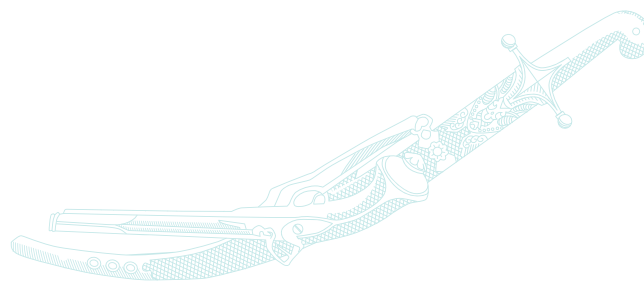
Each board member has the right to attend meetings of all committees (as an invited committee member), but is only entitled to be standing member of between two and five committees.

Decision-making rights are distributed among the NBU Board committees as follows:

- The NBU Board delegates the authority to make final decisions within its defined mandate to two committees (according to the Law of Ukraine *On the National Bank of Ukraine*), namely:
 - 1) Assets and Liabilities Management Committee
 - 2) Committee on Banking Supervision and Regulation and Oversight of Payment Systems.
- The Tender Committee also has the right to make final decisions (according to the Law of Ukraine *On Public Procurement*).

- The Monetary Policy Committee is an advisory body. Following the committee's meetings, the NBU Board meets to discuss monetary policy issues and to make decisions.
- Other committees are advisory in nature, meaning the decisions they make become effective only upon approval by the NBU Board.

In addition, the regulator has a Committee for the Audit of Ukrainian Banks, a body that operates on the basis of Ukrainian legislation, NBU regulations concerning the activities of banks and banking groups, and NBU Board decisions. The Committee for the Audit of Ukrainian Banks has nine members (six representatives of the NBU, one representative of the Audit Chamber of Ukraine, one representative of the National Securities and Stock Market Commission, and one representative of the National Commission for Regulation of Financial Services Markets of Ukraine).



Composition of the NBU's Committees

Participants	Committees (according to functional levels)									
	Policy-making		Policy implementation			Policy support				
	MPC	FSC	ALCO	SC	CC	ORM&BCM	CMC	BC	CBC	TK
1	2	3	4	5	6	7	8	9	10	11
Number of Committee Members	10	9	6	11	8	10	8	8	7	7

Participation of NBU Board Members

NBU Governor	H	H	H							
Deputy Governor in charge of banking supervision	P	P	P	DH	DH					
Deputy Governor in charge of monetary policy implementation	DH	DH					P*			
Deputy Governor in charge of money and FX market regulation	P		DH		H*					
Deputy Governor in charge of cash circulation and cashless transactions				H		H	H			
Deputy Governor in charge of financial and administrative support of the NBU's operations and the development of facilities and infrastructure	P		Inv.				P*	H	H	H

Participation of directors/representatives of NBU departments

Legal Department				P	P	P			P	P
Internal Audit Department					Inv.			Inv.	Inv.	Inv.
Personnel Department						P	P	P		
Risk Management Department		P*	P		P	DH	P			
Banking Supervision Department		P		P	P					
Bank Registration and Licensing Department				P						
Financial Monitoring Department				P						

Composition of the NBU's Committees (*continued*)

1	2	3	4	5	6	7	8	9	10	11
Methodology Department				P						
Banking Inspections Department				P						
Monetary Policy and Economic Analysis Department	2P	P	Inv.							
Financial Stability Department	P	P		P	P					
Statistics and Reporting Department	P									
Open Market Operations Department	P	P	P							
Loan Management Department				P	P					
Payment Systems and Innovative Development Department		P		P						
IT Department						P	P	P	P	P
Operational Department						P				
Security Department						2P		P	P	P
Cash Circulation Department								P		
Chief Accountant								P		
Financial Control Department			P		P		P	DH	DH	DH
Property and Procurement Department						P		P	2P	2P
Strategy and Reforms Department						P	DH*			

Abbreviations:

H – Head of Committee

DH – Deputy Head of Committee

P – Participant

Inv. – Invited participant without voting rights.

MPC – Monetary Policy Committee

FSC – Financial Stability Committee

SC – Committee on Banking Regulation and Supervision and Oversight of Payment Systems

CC – Credit Committee

ALC – Assets and Liabilities Management

Committee

CMC – Change Management Committee

BC – Budget Committee

CBC – Competitive Bidding Committee

TK – Tender Committee

ORM&BCM – Operational Risk Management and Business Continuity Committee

The Mandate of NBU Committees

Committees	Mandate
<p>1. Monetary Policy Committee</p>	<p>An advisory body established to facilitate the exchange of information and opinions regarding the development and implementation of monetary policy.</p> <p>The Committee is tasked with:</p> <ul style="list-style-type: none"> • formulating principles and implementing monetary policy to fulfill tasks and objectives as stipulated by Ukrainian legislation and set out in monetary policy guidelines • determining monetary policy objectives and targets • implementing monetary policy tools.
<p>2. Financial Stability Committee</p>	<p>A consultative and advisory body that develops proposals and recommendations for the formulation of principles and the implementation of macroprudential policy to ensure financial stability.</p> <p>The committee's main tasks are:</p> <ul style="list-style-type: none"> • to identify possible systemic risks to financial stability and table proposals to minimize their impact • develop recommendations for the use of macroprudential policy tools and their coordination with microprudential and monetary policy measures, and monitor the results of their implementation • ensure cooperation between the NBU's operating units in the development of recommendations for financial stability.
<p>3. Credit Committee</p>	<p>A consultative and advisory body tasked with elaborating and submitting to the NBU Board recommendations on:</p> <ul style="list-style-type: none"> • lending to banks to support liquidity, except transactions involving standard liquidity instruments in the banking system, and the Deposit Guarantee Fund • provisioning (release) and use of reserves to cover financial risks associated with the impairment of assets held by the NBU • recovering debts accrued under NBU loans owed by banks deemed insolvent • assessing credit risk methodology (including evaluating collateral) in relation to NBU transactions and risk management.

4. Assets and Liabilities Management Committee

A collective body of the NBU mandated by the NBU Board pursuant to Article 17 of the Law of Ukraine *On the National Bank of Ukraine* to make decisions concerning the management of assets and liabilities, including Ukraine's gold and foreign exchange (international) reserves, to monitor risks, and to deliver financial results on operations with the NBU's assets and liabilities.

The committee's main tasks are:

- to develop and implement an effective policy towards managing assets and liabilities, including international reserves
- to set and execute the NBU's investment strategy on transactions related to the allocation of international reserves
- to develop FX intervention tactics and open market activities
- to develop and implement financial risk management policy pertaining to international reserves and the NBU's market risk exposure
- to monitor market risks and the financial results of operations with the NBU's assets and liabilities.

5. Committee on Banking Supervision and Regulation and Oversight of Payment Systems

A collective body mandated by the NBU Board as per Article 17 of the Law of Ukraine *On the National Bank of Ukraine* to execute certain powers relating to banking supervision and regulation, state regulation and financial monitoring supervision, payment system monitoring (oversight), and FX regulation and control.

The committee's main tasks are:

- to ensure the stability and reliability of Ukraine's banking system and protect the interests of depositors and other creditors
- to address priority issues related to the supervision of banks, their affiliates, and branches of foreign banks, as well as activity in the Ukrainian banking sector
- to identify trends in the banking system and draw up relevant proposals to the NBU Board as necessary
- to coordinate banking supervision
- to enforce corrective measures/sanctions for violations of bank legislation, financial monitoring legislation, payment systems and money transfers legislation, NBU regulations, etc.
- to impose sanctions for violations of financial monitoring legislation on resident non-bank financial institutions that are part of the NBU's area of regulation and supervision in financial monitoring
- to work to prevent crimes and infractions in the banking system
- to enhance legislative support for the implementation of banking regulation and supervision, state regulation and supervision pertaining to financial monitoring, supervision (oversight) of payment systems, initiating new laws, and fine-tuning legislation and NBU regulations.

6. Change Management Committee

A collective advisory body of the NBU designed to centrally manage project activities at the NBU, with the goal of ensuring changes directed at building a modern, institutionally capable financial sector (including the Ukrainian banking sector) and central bank based on the European model.

The committee aims to manage project activity at the NBU centrally. It also examines materials and proposals concerning:

- the initiation and implementation of changes at the NBU, including the central bank's reforms, streamlining its organizational structure, developing and improving its functional activities, upgrading and introducing new products, services, processes, standards, information systems and technologies, etc.
- strategic programs and plans for the financial sector and the development of the banking system in Ukraine
- strategic programs and plans for the NBU's development, and the conclusions of reports on their implementation as part of project activity.

7. Operational Risk Management and Business Continuity Committee

A permanent collective body of the NBU tasked with coordinating activity on operational risk management and the NBU's business continuity, as well as considering proposals/making advisory decisions to:

- define policies related to operational risk management, business continuity, internal control policies, and risk insurance
- establish a process for centralized operational risk management and business continuity of the NBU
- ensure the minimization and/or elimination of operational risks encountered in the course of the NBU's activity
- plan actions aimed at minimizing the risk of financial loss by the NBU
- mitigate negative consequences related to unforeseen events related to the NBU's activity, especially as pertains to the central bank's reputation, operations, asset quality, market position, and ability to fulfill the requirements of Ukrainian legislation
- determine the NBU's plans of action and priorities in terms of operational risk management and business continuity
- monitor the implementation of plans of action in minimizing risks and submitting proposals for fund allocations to mitigate negative consequences
- draw up and test plans designed to ensure the NBU's operational continuity
- apply crisis management in the event of an interruption to the continuity of the NBU's operations
- define a risk insurance policy.

8. Budget Committee

The Budget Committee was set up to ensure a professional approach by heads of NBU subdivisions to issues related to the NBU's supporting activities, with the ultimate goal of improving the quality of managers' decisions. The committee is a collective advisory body of the NBU whose functions are related to budgeting and cost management processes and the acquisition and disposal of NBU property.

The committee's main tasks are:

- to foster the development and implementation of NBU policy aimed at streamlining the management of financial resources
- to ensure the implementation of the budgeting process and its integration with the strategic planning process to establish an integrated system of operations management at the NBU
- to promote the implementation of a cost management process at the NBU to improve the information available to managers while making decisions related to the NBU's financial and economic activity.

9. Competitive Bidding Committee

The committee was established pursuant to the requirements of the Law of Ukraine *On State Procurement*. The committee comprises NBU officials responsible for organizing and conducting procurement as per the abovementioned law. At its meetings, the committee:

- plans procurement activity
- draws up and approves an annual procurement plan and addendums to the annual plan
- selects appropriate procurement procedures.

10. Tender Committee

The committee was established under the Law of Ukraine *On Public Procurement*.

The committee is responsible for procurements (organizing and conducting). It is tasked with:

- planning procurements, drawing up and approving an annual procurement plan, addendums and amendments to the plan
 - conducting procurement on the basis of an appropriate procurement procedure
 - ensuring equal conditions for all participants and a fair and unbiased selection of winners
 - ensuring the preparation, approval, and storage of documents related to public procurements, as required by law
 - ensuring the disclosure of information and a report on public procurements, as required by law
 - providing to individuals who intend to participate in the procurement procedure information on the content of tender documents, if requested
 - performing other actions stipulated by law and the NBU's legal and regulatory acts.
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Committee on the Audit of Ukrainian Banks

A collective body set up by the NBU tasked with monitoring the implementation by banks and audit firms of the requirements of NBU regulations concerning external audits, monitoring the quality of inspections conducted by audit firms of annual financial statements, consolidated financial statements, banking groups' consolidated statements, and other information regarding the financial and economic activity of banks. The committee is also tasked with:

- adding audit firms to the Register of Auditors (which entitles them to audit banks), issuing certificates (copying certificates) on the inclusion of audit firms into the register, renewing (or not renewing) certificates, revoking certificates
- examining bank inspections (in the event of discrepancies following the results of inspections) and written explanations from banks and audit firms concerning external audits
- requiring a bank to perform another audit inspection in a given year and prior to the start of a new reporting period (year) or a re-audit of financial statements by another independent audit firm
- holding hearings of reports by heads of audit firms and/or auditors upon a request to provide an explanation for violations by them of Ukrainian law on bank audits
- applying measures to audit firms that are entitled to audit banks commensurate with committed violations, in accordance with NBU regulations
- submitting to the Audit Chamber of Ukraine proposals to apply relevant penalties to auditors and/or audit firms as per the Law of Ukraine *On Auditing* and others.

"The acts of the righteous will replenish –
the acts of the wicked will perish"

Taras Shevchenko

04 CORE FUNCTIONS

04 Core Functions



DELIVERING PRICE STABILITY

- Monetary Policy Objectives
- Monetary Policy and the Macroeconomic Environment
- Interventions in the FX Market and International Reserves
- NBU Statistics
- Research at the NBU
- Monetary Developments
- New Monetary Policy Operational Design
- FX Market Liberalization
- Capital Market Developments

PROMOTING FINANCIAL STABILITY

- Banking Sector Conditions and Risks
- Bank Regulation and Supervision
- Participation in the Financial Stability Board

DEVELOPMENT OF PAYMENT SYSTEMS AND SETTLEMENTS

- Building a Cashless Economy
- Development of Payment Systems and Oversight
- Development of Cashless Payments
- System of Electronic Payments at the NBU
- The PROSTIR Ukrainian Payment Area
- Cash Circulation

*We are honest and principled, we understand and respect diverse ideas and views,
and we always adhere to ethical business standards*

INTEGRITY – a key value of the NBU

We act for the benefit of the nation and of society

PATRIOTISM – a key value of the NBU

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YEARS OF CURRENCY REFORM

Deputy Governor of the National Bank of Ukraine Dmytro Sologub



“Prudent monetary and fiscal policies were primarily responsible for achieving macroeconomic stability in Ukraine...”

The NBU has successfully completed the first full year of inflation targeting by meeting the announced inflation target. Contrary to skeptical opinions, the inflation rate fell from 43.3% in late 2015 to 12.4% in late 2016. The inflation rate was in line with the target set out in the Monetary Policy Strategy for 2016 to 2020. A stable macroeconomic environment helped achieve economic growth of 2.3% in 2016.

Prudent monetary and fiscal policies were instrumental in reining in inflation. The NBU maintained high interest rates, using the key policy rate. The government's efforts to meet the budget deficit target also contributed to the sharp decline in inflation.

It is important to note that the NBU increased its ability to curb inflation by making the key policy rate its main monetary tool. To that end, the NBU improved its interest rate policy in early 2016. This made monetary policy more transparent and predictable, increasing the influence of the NBU's interest rate policy on interbank market rates.

FX market conditions indirectly helped reduce inflation. The FX market was stable throughout most of 2016, thanks to an improved external environment and a record harvest of grains and other crops. The NBU remained committed to a floating exchange rate regime, allowing the exchange rate to change in response to fundamental factors.

Other contributors to the disinflation trend were improved economic expectations, resulting, among other things, from a de-escalation in the military conflict in eastern Ukraine, and an increased supply of foods.

At the times when risks to price stability decreased, the NBU cut its key policy rate to promote economic growth. Over the year, the central bank cut its key policy rate six times – from 22% to 14%. The yields of national currency government T-bills of all maturities gradually decreased in response.

The key policy rate cuts also transmitted to interest rates on retail loans and deposits, although with some lag and to a lesser extent. This also paved the way for a gradual revival of lending, which will support future economic growth.

Throughout the reporting year, the banking system was flush with liquidity. However, in view of high legal risks and large debts of businesses lending recovered slowly.

A gradual revival of confidence in banks, the pick-up of economic activity and the better financial performance of businesses spurred the return of national currency deposits to the banking system, and stopped the outflow of foreign currency ones.

The NBU's monetary policy in 2017 will be aimed at meeting the inflation targets set out in the Monetary Policy Guidelines for 2017 and the Mid-Term. The NBU expects inflation to decrease further, reaching single digits as early as in 2017. Monetary policy will aim at achieving the inflation target of $8\% \pm 2$ pp in 2017 and $6\% \pm 2$ pp in 2018.

Financial and price stability will support sustainable economic growth. The NBU will also continue its efforts to revive lending. However, structural reforms, including anti-corruption, judiciary, pension, and land reforms are urgently needed to sustain economic growth.

For its part, the NBU pledges to lay the foundation for economic growth by delivering price stability.



Delivering Price Stability

Monetary Policy Objectives

In 2016, the NBU's monetary policy was in line with the objectives and tasks outlined in the Monetary Policy Strategy for 2016-2020⁴. The Policy, for the first time ever, set a fixed inflation target and established an inflation targeting regime in Ukraine.

The main monetary policy objective was to cut the inflation rate to $12\% \pm 3$ pp by late 2016. The NBU succeeded in meeting the target – the consumer price index was up by only 12.4% last year. To that end, the NBU reshaped its monetary policy to make it more effective and transparent, as well as enhanced the accountability of the monetary policy unit.

A stable macroeconomic environment and a gradual monetary policy easing, together with decreased inflation risks, helped achieve economic growth of 2.3% in 2016.

While implementing its mandate of delivering price stability, the NBU remained committed to a floating exchange rate regime. In 2016, monetary policy was not geared towards maintaining the exchange rate at a designated level or range. The NBU's policy on interbank foreign exchange market operations was in keeping with the central bank's foreign exchange market intervention strategy for 2016 to 2020. The NBU's prudent policy on foreign exchange market interventions reduced the average monthly volatility of the UAH/USD exchange rate from 28.8% in 2015 to 6.2% in 2016.

When the supply of foreign currency exceeded demand on the domestic market, the NBU purchased foreign currency to replenish international reserves. As a result, the NBU's net foreign currency purchases totaled USD 1.6 billion in 2016. This, together with the third tranche under the IMF Extended Fund Facility, pushed international reserves up to USD 15.5

billion, or 3.3 months of future imports as of the end of 2016 (from USD 13.3 billion as of end-2015).

Monetary Policy and the Macroeconomic Environment

As inflation risks reduced, the NBU gradually eased its monetary policy in 2016 in order to boost economic activity. This was mainly done by cutting the key policy rate. The central bank operated a reasonably tight monetary policy to be able to decrease inflation further, and to meet the announced inflation target.

The decisions to cut the key policy rate were based on the NBU Board's assessment of inflation risks.

From January through April 2016, the NBU conducted a tight monetary policy by keeping the key policy rate at 22%. The NBU delivered such monetary conditions taking into account external and internal risks to achieving inflation targets. The most material external negative factors included:

- a turbulent global economy
- a fall in the prices of Ukrainian exported goods
- a depreciation of the currencies of Ukraine's main trading partners
- new trade restrictions introduced by Russia
- Ukrainian exporters being slow in focusing on new markets and finding new delivery routes.

Other risks included the delay of official financing under the Extended Fund Facility, internal political instability, and increased FX market tensions.

From late April through October 2016, the NBU gradually eased monetary policy.

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YEARS OF CURRENCY REFORM

⁴ Approved by NBU Board Resolution No. 541 of 18 August 2015

The key policy rate was cut 6 times: from 22% to 14% per annum. This was made possible mainly by the steady rate of disinflation.

The slowing of inflation was driven by:

- a moderate appreciation of the hryvnia exchange rate due to an improvement in global commodity market conditions and the renewed transit of Ukrainian goods through Russia
- a reduction in political tensions after the new government was formed in April 2016
- restrained domestic demand
- high supplies of foods, resulting, among other things, from a bountiful harvest
- improved inflation expectations from households and businesses, due to, among other factors, the completion of the second review under the Extended Fund Facility and financing received by Ukraine in early September 2016.

In the last two months of 2016, the NBU did not ease monetary policy any further, keeping the key policy rate at 14%. This decision reflected the development of risks to inflation and to the inflation target set for 2017. Those risks included increased political turmoil, the delay of official financing owing to slow action on the reforms required by the program with IMF, and rising tensions on the foreign exchange market. The NBU also considered the need to offset the effect on inflation of a minimum wage increase in 2017.

A prudent monetary policy markedly reduced headline inflation (from 43.3% in 2015 to 12.4%⁵ in 2016).

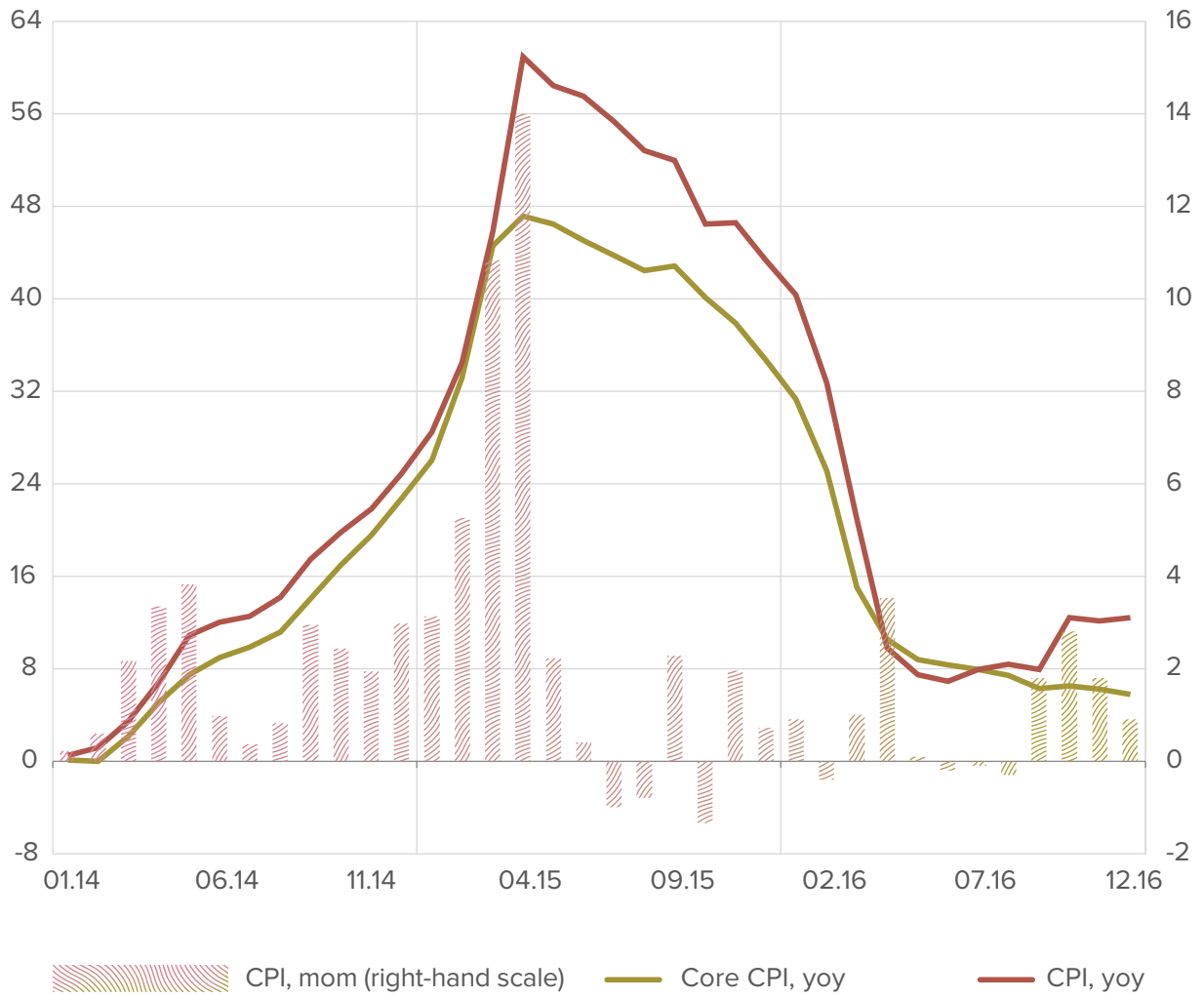
The sharp fall in the inflation rate in 2016 was mainly the result of eased inflationary pressure due to fundamental factors. This was evidenced by a rapid drop in core inflation (to 5.8%, down from 34.7% in 2015). Prudent monetary and fiscal policies contributed to the reduction of both core inflation and overall inflationary pressures. The enhanced role of the key policy rate and the gradual cuts in the rate over the year, together with the government's efforts to meet the budget deficit target, significantly improved inflation expectations. A de-escalation in the military conflict in eastern Ukraine also played a role.

Secondary effects arising from factors related to the supply of raw foods were also important contributors to the drop in core inflation. Raw food inflation retreated to 1.2% in 2016 from 40.7% in 2015, driven by various supply factors. These factors included good harvests: in Ukraine these were grain and vegetable harvests and the harvest of some fruits (such as apples), while in other countries these were citrus harvests. In addition, Russia's trade policy towards Ukraine (an embargo on food exports was imposed in early 2016) and other countries increased the supply of foods on the domestic market.

As in 2015, increases in administrated prices and global oil prices were key contributors to the growth in prices in 2016. Growth in administrated prices, although slowing to 34.6% yoy in 2016 (compared with 64.4% in 2015), still remained high, driven by a 50.9% rise in utility prices. Tobacco and alcoholic beverage prices also increased. Fuel prices rose by 19.5% in 2016, up from 12.3% in 2015, driven mainly by higher global oil prices.

⁵ All the inflation rates are indicated as of end-December of 2016 yoy e.g. compared with December 2015

Change in price indices⁶



⁶ Source: State Statistics Service of Ukraine

A stable macroeconomic environment, together with a gradual easing of monetary policy, promoted economic growth – real GDP grew by 2.3% over the year.

Domestic demand, especially investment demand, was the major contributor to economic growth. Investment activity picked up, driven by the improved financial performance and expectations of businesses, large budgetary capital expenditures, as well as deferred investment demand. Agriculture, the output of which increased by 6.1% in 2016, had the strongest investment demand. This was attributed to the record harvest of grains (66.1 million tons) and other crops, like oilseeds. Investment in certain sectors, particularly the food production industry, grew significantly. Housing investment and investment in road and transport infrastructure recovered, pushing up construction output by 17.4% in 2016.

Private consumption, also picking up by 1.8%, remained subdued, due to a moderate rise in real disposable household income, increased utility prices, and a still high unemployment rate. Households relied on savings to maintain their consumption levels.

Wholesale turnover grew by 4.9%, driven by high investment demand, an increase in crop sales, and a gradual rise in industrial output.

Industrial output grew by 2.8% in 2016. This was mainly attributed to a 6.8% increase in metallurgical output resulting from an improvement in global metal market conditions. However, recurring problems with the supply of raw materials due to transportation difficulties and the high volatility of global commodity prices impeded further growth of industrial output.

Demand for labor recovered in 2016, especially in the latter half of the year, as economic activity picked up and business expectations improved. Demand for labor grew on average by 6.3% yoy in 2016 (according to the State Employment Service), with the number of applicants per vacancy decreasing by 16.1%.

However, the unemployment rate based on ILO methodology (percentage of the economically

active population aged 15-70) remained high. The unemployment rate (ILO basis) increased slightly in 2016 to 9.3% from 9.1% in 2015. This suggests that there are still significant labor demand and supply mismatches (regional mismatches and mismatches in terms of economic activities and professions).

Interventions in the FX Market and International Reserves

In 2016, the NBU approved the FX Market Intervention Strategy for 2016 to 2020, setting out the rules for carrying out interbank FX transactions under an inflation targeting regime.

The NBU intervenes in Ukraine's interbank FX market in order to:

- build up international reserves
- smooth out exchange rate fluctuations
- support the transmission of the key policy rate as the main monetary policy tool.

If there is a conflict between the short-term objective of delivering price stability and the short-term objective of building up international reserves, priority is given to delivering price stability.

The strategy outlines the following types of FX market interventions:

- FX auctions
- single-rate interventions
- requests for best quotes, targeted interventions.

In 2016, apart from one single-rate intervention to purchase foreign currency carried out in April 2016, the NBU mainly intervened in the FX market using FX auctions. There were no requests for best quotes and targeted interventions in the reporting year. By intervening in the interbank FX market, the NBU purchased USD 1.6 billion net. The NBU's prudent policy on FX market interventions reduced the average monthly volatility of the UAH/USD exchange rate from 28.8% in 2015 to 6.2% in 2016.

Net foreign currency purchases on the interbank FX market, together with a third tranche of USD 1 billion received under the IMF Extended Fund Facility and related financing, had pushed international reserves up to USD 15.5 billion, or 3.3 months of future imports by late 2016. Thus international reserves grew by 16.8% or USD 2.2 billion in 2016.

The goal of the NBU's international reserves management was to ensure an optimal ratio between security, liquidity, and profitability, as outlined in the central bank's statutory functions.

In the reporting year, the management of international reserves was conducted according to Ukraine's international reserve investment declaration for 2016.

International reserves were held in accounts opened with correspondent banks, as well as in financial instruments with a long-term credit rating of no lower than A. Credit risk was managed by

setting credit limits for correspondent banks. Credit and interest rate risks were managed by diversifying international reserves.

In managing international reserves, the NBU used external fixed income securities and short-term deposits with foreign banks.

Counterparty banks met all their obligations to the NBU related to deposits and financial debt instruments in full and in due time.

With the purpose of ensuring the uninterrupted functioning of Ukraine's financial system and the discharge of government obligations in due time, the NBU maintained international reserve liquidity at a high level by choosing highly reliable counterparties and government bonds. This was also done by setting a limit on the planned investment period and constantly monitoring the liquidity parameters of reserve currencies and financial instruments.



NBU Statistics

In 2016, the NBU was involved in efforts to centralize and standardize the collection and quality control of statistical data, as well as to introduce new ways of collecting and distributing statistics and other information.

A New Approach to Statistics

The NBU launched a new approach for reporting entities to compile and submit data, which involved collecting data on specific indicators rather than through the old reporting formats. Non-banking financial institutions and businesses that submit reports to the NBU have been piloting the new process. They have already started to submit data according to the NBU's list of indicators and to submit the data as XML files through the NBU's website, which is currently running in test mode. Statistical reports are signed using electronic signatures, which can be obtained at certified key centers.

These changes simplify the compilation and submission of statistics to the central bank, replace paper reports with electronic ones, and bring statistics submission processes closer to international standards.

The NBU has also centralized the collection and processing of reports and statistics. To that end, the NBU's Statistics and Reporting Department was tasked with collecting and compiling all statistics, and NBU structural units transferred over 60 statistical forms to the department. On the one hand, this enhanced the quality of, and the speed at which, statistics are compiled and disseminated. On the other hand, this helps fully meet the information needs of internal and external users.

Lending Survey

Receiving constructive feedback from banks, which are the main credit market actors, on how they understand NBU actions is important for taking monetary policy decisions and assessing the level of confidence in the central bank. For that reason, the NBU carries out quarterly surveys of bank credit managers. These surveys provide the NBU with realistic assessments and expectations of changes in

lending conditions for the corporate sector and households.

In 2016, the NBU significantly altered its survey procedures by:

- introducing online survey technology
- updating methodology (based on the survey methodology used by the European Central Bank)
- bringing terms and definitions in line with international statistical standards
- launching personalized accounts for banks
- adopting a modularity principle and introducing interactive prompt messages that pop up in respondents' questionnaires.

This made surveys more respondent-friendly, increased the quality and completeness of information provided by credit managers, improved the NBU's communications with credit market players, and provided a better understanding of how monetary policy influences the economy.

OpenData Project

An important step was the launch of the OpenData project in 2016, allowing reporting entities a wider choice of machine-readable data formats when submitting statistics. In response to modern global trends, the NBU will phase out HTML, XLS, and PDF formats and replace them with XML and JSON formats via the API.

By late 2016, the NBU had significantly increased the set of monetary and financial statistics and made it available on its website in XML and JSON formats via the API. Overall, the NBU made over 110,000 indicators available. In 2017, the NBU intends to make all data digitally readable.

The API turns information into a structured body of data, while ensuring the interoperability and availability of the data. Statistical data sets will be available to the government and corporate sectors, as well as to private individuals. All users will be able to use data in the way that is most convenient for them, which includes sharing, providing links to, and incorporating data.

Research at the NBU

In 2016, the NBU maintained its efforts to carry out research. To systematize research, and guided by its main strategic documents (such as the Monetary Policy Strategy for 2016 to 2020 and the Comprehensive Program of Ukrainian Financial Sector Development until 2020), in the reporting period, the NBU designated priority areas for research. These included:

- monetary policy: adopting an inflation targeting regime
- financial stability: micro- and macroprudential regulation policy
- macroeconomic modeling and forecasting: building structural and econometric models.

One of the main events in the area of research was the First Annual Conference *on Transformation of Central Banking*, which was held by Ukraine and Poland's central banks, with the support of the Canadian government and the Kyiv School of Economics, on 19-20 May 2016. This conference had five research sections and three panel discussions, and convened more than 300 participants, including representatives of central banks, international financial institutions, domestic and international academia and the expert community.

Among the speakers were Philipp Hildebrand, a vice-chairman of BlackRock, an international investment company; Zdenek Tuma, a former

governor of the Czech National Bank; Per Jansson, a deputy governor and a member of the board of Sveriges Riksbank; Maurice Obstfeld, an economic counsellor and the director of research at the International Monetary Fund; as well as many other famous researchers, experts and practitioners. As part of the event, the NBU offered lectures at higher schools, where students and young scholars could talk to the conference's key speakers.

In 2016, the NBU also continued to hold open research seminars. These seminars provided NBU staff and invited experts with an opportunity to discuss international trade problems, the specific nature of price setting on online markets, the passing through of the exchange rate onto Ukraine's domestic prices and stock-flow reconciliation modeling discussed in the studies by Sergii Meleshchuk (University of California, Berkeley), Oleksandr Talavera (University of Sheffield), Oleksandr Faryna (National Bank of Ukraine), and David Wheat (University of Bergen) respectively.

In line with its research strategy, and in line with best practices, the NBU launched a working paper series in 2016. Working papers contain findings from research in the area of central banking carried out by NBU staff and invited scholars. These papers draw attention to relevant issues and generate feedback, which improves current research. Obligatory reviews by external reviewers ensure the high quality of the materials.

Deputy Governor of the National Bank of Ukraine Oleg Churiy



“An enormous scope of work has been accomplished over the last two years. The actions have triggered a deep and large-scale transformation of the currency market. Stabilizing the market and reinforcing its resilience to internal and external shocks was our most important achievement”

Last year proved challenging for the NBU’s monetary policy. After transitioning to an inflation targeting regime, we have committed to a flexible hryvnia exchange rate. We were faced with the task of shifting the Ukrainian people’s focus from the exchange rate to price trends. The effectiveness of monetary policy within an inflation targeting regime is dependent on inflation expectations not duplicating devaluation fears and with market participants being guided by the central bank’s communications.

It has not been an easy task, but the first steps have already been taken. Ordinary individuals, analysts, businesses, and bankers are showing more confidence in the NBU’s ability to curb inflation, and they are attaching less importance to fluctuations of the hryvnia exchange rate.

The stabilization of the currency market in 2016 is a sign of the success of the chosen path. Another factor contributing to the stabilization was the recovery in prices for Ukrainian exports on global markets, the record harvest, support from the International Monetary Fund and Ukraine’s other external partners, as well as improved public expectations.

The NBU did not set out to support the hryvnia exchange rate but only acted to smooth excessive fluctuations stemming from temporary factors, as per the NBU’s Foreign Exchange Market Intervention Strategy for 2016-2020.

In addition, thanks to the currency market stability, the NBU replenished reserves through net USD 1.6 billion in FX purchases. With official financing also coming in, international reserves grew to USD 15.5 billion.

The favorable conditions eliminated the need for tough administrative restrictions on the currency market, and after almost two years of crisis mode on the FX market, 2016 marked the long-awaited gradual liberalization of FX regulation. In particular, we eased the requirements for the mandatory sale of foreign currency earnings, extended the deadline for settlements under goods export/import transactions, exempted from mandatory sale funds received for foreign investment in Ukraine, allowed the repatriation of dividends to foreign investors accrued for 2014-2015, and more.

The pace of further liberalization will be primarily determined by the favorability of conditions for money and FX markets in Ukraine, and, most importantly, the implementation of crucial structural reforms. Our actions must not cause hryvnia pressures to flare up. I believe Ukrainian citizens, businesses, and foreign investors understand this quite well.

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YEARS OF CURRENCY REFORM

In addition, we are considering the possibility of moving to a completely new model of currency regulation that we presented in late 2016. The liberalization will take place gradually in several parallel stages. In the first stage, we will lift restrictions on export-import operations and on foreign direct investment aimed at boosting Ukraine's export potential. Afterwards, we will lift restrictions on portfolio investment and debt capital flows. And finally, restrictions will be lifted on individuals' foreign financial transactions.

However, to completely switch to a more liberal model of FX regulation, strict FX regulation must be replaced by efficient tax regulation. We are therefore proposing that Ukraine adopt the five key and most urgent of the OECD's 15 recommendations related to base erosion and profit shifting (BEPS).

The new model of currency regulation will be proposed in a draft law on foreign currency, which we have been working on jointly with European experts since autumn 2016. We plan to submit the first draft in Q2 2017. We hope the Verkhovna Rada of Ukraine will support the initiative, which would allow Ukraine to adopt a single law outlining the main principles of currency regulation, instead of numerous split regulations.

Further growth of reserves remains an important task, especially in the context of high external public debt payments starting in 2019. Given the need to make large payments on public debt, continued cooperation with international partners and the further implementation of crucial structural reforms are critical to ensuring Ukraine's ability to meet its external debt obligations without triggering undue volatility in the FX market and jeopardizing the stability of the financial system as a whole.



Monetary Developments

Interest rates gradually fell in 2016 in response to the well-thought-out cuts in the NBU's key policy rate. In particular, the weighted average interbank overnight loan rate went down from 18.8% in December 2015 to 12.8% in December 2016. The yields of national currency government T-bills with all maturates also decreased.

The key policy rate cuts also transmitted to interest rates on retail loans and deposits, though with some lag and to a lesser extent. The smaller size of the effect on retail rates was attributed to high credit risk and the low solvency of borrowers. Household's greater sensitivity to situational factors also decreased the size of the effect. The high interest rates on household loans were due to these consisting mostly of consumer and card loans, which are relatively expensive to service.

Foreign exchange market conditions (the foreign exchange market was mostly stable in 2016, apart from the beginning and the end of the year) helped decrease interest rates indirectly. This was mostly due to an improved external environment (higher steel and iron ore prices) and the record high harvest of grain and other crops seen in the reporting year, which offset a drop in global grain prices.

Apart from that, in the reporting year, the NBU smoothed out exchange rate fluctuations on the interbank market. While doing that, the NBU did not prevent the exchange rate from moving in both directions, driven by fundamental market factors. Under the right conditions, the NBU intervened to purchase foreign currency to replenish international reserves.

In the cash foreign exchange market, the supply of foreign currency exceeded the demand for it throughout the year. Temporary increases in households' demand for foreign currency, accompanied by falls in the supply of it, are due to households being sensitive to negative situational factors. However, over the whole of 2016, foreign currency sales by households exceeded purchases by USD 2.5 billion.

Over the whole of 2016, the UAH/USD exchange rate dropped by 13%, driven by the devaluation pressure seen in late 2016. The interbank supply of foreign currency fell dramatically in November through December. This was attributed to an accelerating fall in FX earnings from agricultural exports towards the end of the year (agricultural exports are one of the main sources of FX earnings). Another factor was businesses receiving large amounts of VAT refunds, which decreased their need to exchange foreign currency for hryvnias. Meanwhile, market players' stepped up their demand for foreign currency, which they needed to repay their foreign currency loans.

Over that period, however, the currencies of most of Ukraine's trading partners, including the euro, experienced devaluation pressure. This pushed the hryvnia's nominal effective exchange rate down by 9.1% yoy, offsetting inflation in Ukraine, which was still higher than that seen by Ukraine's trading partners. The hryvnia's real effective exchange rate dropped by 1.8% over that period.

New Monetary Policy Operational Design

In April 2016, the NBU improved its monetary policy tools by bringing them into line with inflation targeting standards. This pronouncedly increased the influence of the key policy rate on the money market and, in particular, on interest rates.

This key policy rate was made the interest rate on the NBU's main tool. The NBU pegged the interest rate on its main tool on the key policy rate. Given a structural liquidity surplus, the NBU used two-week certificates of deposit as its main monetary policy tool. If there is a liquidity deficit, the NBU will use its key policy rate to provide liquidity.

Pegging the rate on two-week certificates of deposit on the key policy rate enhanced the effectiveness of managing interbank short-term interest rates.

As part of its monetary policy change, the NBU also fixed interest rates on standing facilities. The cap of the interest rate band is the overnight loan rate (+2 pp of the key policy rate), with the overnight deposit rate (-2 pp of the key policy) rate being the floor. This band limits fluctuations of interbank credit market rates, while retaining stimuli to the reallocation of funds on the interbank market.

At the same time, the NBU improved liquidity management processes and tools.

First, the NBU cancelled regular tenders to issue certificates of deposits with maturities other than two weeks. In the past, the NBU regularly issued certificates of deposit with maturities of one day and one month. The reason behind the decision to stop issuing certificates of deposits with those maturities was to speed up the reallocation of interbank funds, and to increase the influence of the main monetary policy tool, two-week certificates of deposit, on the market.

Second, the NBU made it impossible to withdraw money from certificates of deposit before the maturity date. Since certificates of deposits used to absorb liquidity had a short maturity, no early withdrawal procedure was required.

Third, the NBU started to provide liquidity at a single rate, which equaled the rate on overnight loans. Allowing rollovers of overnight loans made these loans identical to liquidity support tenders.

Monetary policy change:

- made monetary policy more transparent and predictable
- made signs of policy change clearer
- promoted interbank credit market growth.

The new key policy rate, which underlies all the other rates, including those of the central bank, influences interest rates on other financial assets (such as government securities), as well as interest rates on retail loans and deposits. This means that the NBU's current monetary policy contributes to achieving inflation targets.

FX Market Liberalization

In 2016, the NBU adopted a policy on a new model of relaxed FX controls.

In line with this policy, the NBU is relaxing FX controls to achieve the target model in several stages.

- At the initial stage, the NBU will ease restrictions on export and import transactions and direct foreign investment, which is used to increase the country's export potential.
- At the interim stage, the NBU will ease restrictions on portfolio investment and debt flows.
- At the final stage, the NBU will lift all restrictions on private individuals' transactions abroad.

While relaxing FX market controls, the NBU will bear in mind that actions taken to that end should not destroy the still fragile financial stability. That said, the speed at which FX market controls are relaxed will depend on whether or not important conditions are met rather than on setting deadlines. These conditions include:

- economic growth and low inflation
- no significant BOP imbalances
- a stable financial system
- a sufficient amount of international reserves
- developed financial markets
- protected investor rights.

Last year, guided by these principles, the NBU reduced the amount of foreign currency earnings businesses, especially exporters, had to sell; increased the term for settling foreign economic transactions; and decreased the term for which businesses had to put aside national currency in order to purchase foreign currency. In addition, the NBU allowed foreign investors to repatriate dividends.

Relaxing FX market controls further will also depend on whether or not effective tax controls are put in place. Failure to do so will entail

a significant risk of capital flowing out of Ukraine via various schemes, as well as the budget not receiving a large amount of tax revenues. Therefore, the NBU, together with Ukraine's State Fiscal Service, the parliament's tax and customs policy committee and experts from the Big Four accounting firms, last year developed a draft law to prevent capital outflow via low-tax and other foreign jurisdictions. This draft law will introduce the main five out of the OECD's 15 anti-BEPS principles.

The draft law envisages the following main steps to tackle BEPS:

- setting out taxation rules for controlled foreign companies. Ukrainian residents (private individuals), in Ukraine, will pay a tax on the retained income generated by foreign companies they own or control. They will also be required to declare their holdings in, or control of, foreign companies
- limiting expenses related to financial transactions with related parties. The draft law will toughen restrictions on the tax accounting of expenses related to financial transactions with related parties
- preventing abuse of double tax agreements. The draft law will put in place General Anti-Abuse Rules (GAAR) to prevent abuse of double tax agreements
- preventing the artificial avoidance of permanent establishment status. The draft law will introduce clearer rules for taxing non-residents' permanent establishments in Ukraine to prevent the artificial circumvention of these rules

- introducing reports for groups of international companies. The draft law will introduce reports for disclosing information about company groups that are located in Ukraine and abroad.

The draft law will also allow the tax authorities of the countries that have entered into relevant agreements to exchange financial information automatically, using a single standard.

These steps will allow the NBU to adopt a new model of more relaxed FX market controls, focusing mainly on transparent financial monitoring.

The new model of FX market controls will be introduced by adopting a new law, which will replace the 1993 Ministerial Decree on Foreign Exchange Regulation and Controls and related laws and regulations. Since November 2016, an NBU task force, consisting – among others – of experts invited by the European Commission, has been developing a new draft law as part of the EU-FINSTAR project. The new draft law, called the currency law, will be a single framework law, setting out the main principles for foreign exchange regulation in the country. At the same time, specific issues will be covered by related regulations.

This is expected to make foreign exchange regulation in Ukraine transparent, simple and understandable for private individuals, businesses and banks, while allowing the NBU to respond to changes in the balance of payments and market conditions more effectively and in good time. The draft law will also help adapt Ukrainian laws related to foreign exchange regulation and controls to the free movement of capital, as set forth in EU legislation.

Capital Market Developments

In 2016, the NBU was involved in constant efforts to build an effective and modern clearing infrastructure on Ukraine's capital market, which would be investor- and issuer-friendly. Although such projects mostly fall within the mandate of the National Securities and the Stock Market Commission, the NBU, Ukraine's National Depository and other market players, supported technically by international donors, such as the EBRD, are also important contributors.

On today's agenda is creating a target model for the stock market's clearing infrastructure, which will foster capital market growth. The target model must comply with EU requirements and be based on best practices. This includes establishing a single securities depository, allowing entities to settle transactions with the central bank's money and integrating Ukraine's capital market into international financial markets.

With the purpose of improving its depository services, the NBU has already centralized all of its depository activities in one unit, the Office for Custodial Activity. This step created a single center that provides depository services to customers. Next step is to transfer the NBU's function of a government securities depository (the NBU's Depository) to Ukraine's National Depository, which is the country's central depository. The transfer should not make it difficult for the NBU to conduct monetary operations, such as refinancing operations for commercial banks, and ensure that government securities are safely kept and settled.

The NBU will transfer its function of a government securities depository to the Central Depository once all reforms of the latter have been completed. In 2016, the Central Depository, supported by its major shareholders, the NBU and the National Securities and the Stock Market Commission, took actions to improve its corporate governance. This was done

in view of the need to develop the depository by strengthening its functions, introducing international depository standards, updating the depository hard- and software, and inviting the most experienced professionals to manage the depository. To that end, the depository introduced the practice of holding public competitions to hire top managers, and established an institute of independent directors when setting its new supervisory council.

Another important step in developing financial market infrastructure was establishing correspondent relations between the NBU Depository and global depositories. In particular, the NBU Depository opened a correspondent account at a global depository for holding Ukrainian Eurobonds that are locally owned by Ukrainian depositories and their customers. Customers of the NBU Depository will be able to use the services of that global depository later in 2017, once the NBU has finished improving its internal processes and regulations.

The most important step, however, will be global depositories opening accounts at the NBU Depository. This will greatly simplify access for international investors to Ukraine's capital market, and decrease the Finance Ministry's borrowing risks, as well as the cost of borrowing by diversifying the investor base and increasing the percentage of national currency borrowing.

The NBU also supported the initiative to open nominee accounts at Ukrainian depositories. Ukrainian market players have been waiting for the opening of nominee accounts by leading international custodian banks for over 15 years. This is expected to provide fresh impetus for foreign investors' entering the Ukrainian market by putting in place clear and simple procedures that have been adopted by all developed countries. In order to speed up the launch of this initiative, it was included in the revised Comprehensive Program of Ukrainian Financial Sector Development Until 2020.

Promoting Financial Stability

Deputy Governor of the National Bank of Ukraine Kateryna Rozhkova



“2017 will mark a new beginning for Ukraine’s renewed banking system”

Perhaps someday we’ll write a book on how we resolved the PrivatBank problem. I’m sure it’ll be a bestseller, especially among banking experts. And not only in Ukraine, but also abroad. The NBU conducted an unprecedented operation to rescue the country’s largest private bank. Throughout the process, the accounts of its millions of retail customers were not blocked and the settlements infrastructure continued working.

There was no guarantee of a positive outcome, simply because no one in Ukraine had ever embarked on a similar task. But our team decided to take this step after a thorough assessment of risks. Our calculations and the actions agreed on with the government, the president, and the parliament allowed the state to enter the capital of PrivatBank without any problems. Even enormous pressure from various political forces uninterested in our results-oriented approach did not stand in our way.

PrivatBank is but one link in a long chain of significant changes that have taken place in banking supervision and regulation over the past two and a half years. From 2014 to 2017, 87 banks were liquidated. Let’s take a look at those banks.

Among them, seven were located in annexed Crimea and in the area of the Anti-Terrorist Operation in Eastern Ukraine. The owners of five banks decided to exit the market, while another 14 banks were liquidated for AML/CTF violations and for outright fraud. But most of the banks closed because of a complete loss of capital and liquidity. In some of these banks, loans to shareholders’ related parties accounted for 90% of the portfolio. These banks could not possibly have remained operational, could they?

The banking market has now become transparent, capitalized, responsible, and reliable.

The 20 largest banks have achieved 5% capital adequacy and are required to show 7% adequacy by the end of 2017. The next group of largest banks passed the zero capital mark as of 1 January 2017. We have also performed a diagnostic study of the next 20 banks: they showed zero capital in March 2017. We will complete the diagnostic study of the remaining 37 banks in Q3 2017.

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YEARS OF CURRENCY REFORM

The system will develop and it will strengthen. And we have a lot planned for the next year. In particular, we intend to:

- launch the New Supervision project, which aims to change the approach to prudential supervision. Change from supervising banks' compliance with standards to a proactive approach to supervision. That means we will not only fix problems at banking institutions, but test and forecast their future performance. We will perform preemptive supervision;
- ensure the proper and timely assessment of credit risk by banks, which will promote correct capital calculations and improve the financial soundness of the banking sector;
- promote a resumption of active lending.

Signs of a recovery in lending appeared in 2016, but in 2017 lending must become large-scale. This, however, requires legislative changes; the Verkhovna Rada of Ukraine must adopt a number of laws, without which lending will be stalled.

The items I outline above constitute only a fraction of what our team planned and what I am sure we will implement. We are ready to change the system for the better with the help of the banking community and with the support of parliament, which should provide a legislative base for systemic changes in our country.



Banking Sector Conditions and Risks

In 2016, the National Bank of Ukraine successfully implemented a strategy for banking sector reform aimed at the sector's rehabilitation and the restoration of confidence by the population and by businesses.

The removal of insolvent banks from the market is almost complete. The next stage of the Comprehensive Program of Ukrainian Financial Sector Development until 2020, the banking sector reboot, has begun.

This stage involves the elimination of numerous administrative constraints and the creation of conditions for the resumption of lending, namely increasing the capitalization of financial institutions, increasing the transparency and security of parties along the shareholders-management-clients chain, and strengthening the protection of the rights of borrowers, lenders, and investors.

In 2016, financial institutions gradually recognized the fair value of assets, fulfilled capitalization plans, reviewed business models, and gradually reduced lending to related parties to levels established by the regulator.

The National Bank of Ukraine completed the diagnostic study of the 40 banks ranked 20th to 60th by assets. These banks' assets account for 9.5% of the banking system. Overall, in 2015-2016, over 60 banks, representing more than 98% of sector assets, underwent a diagnostic study.

The results of the tests showed that banks reflected loan portfolio quality and recognized credit risks improperly. To address these shortcomings, financial institutions established three-year plans to re-capitalize and minimize loans to related parties. Banks 21-40 by assets are required to meet 0% regulatory capital adequacy levels as of 1 January 2017 and 5% as of 1 April 2017, while banks 41-60 by assets are to reach 0% by 1 April 2017 and 5% as of 1 July 2017. The diagnostics showed that 21 of 60 banks did not require additional capital. Nine banks completed their three-year re-capitalization plans ahead of schedule.

In 2016, the total number of banks operating in Ukraine decreased by 21. Out of this number,

nine banks ceased operations due to poor financial standing, 12 banks were withdrawn from the market for reasons other than financial ones:

- non-compliance with financial monitoring requirements (3 banks);
- nontransparent ownership structure (4 banks);
- voluntary liquidation (3 banks);
- conflict of interests at a bank (1 bank);
- failure of bank's shareholders to increase the authorized capital (1 bank).

As of 1 January 2017, 96 banks were solvent.

At the end of December, PrivatBank became a state-owned bank. The move saved the funds of over 20 million customers and minimized risks to financial stability that resulted from a significant lack of capital at the systemically important bank. As a result, the structure of the banking sector changed: the share of state-owned banks in terms of net assets increased to 51.3% from 28.1% at the start of 2016 and by households' deposits by almost three times to 59.5%.

The sector also became less fragmented: the 20 largest banks by net assets held an 89.4% share as of year-end, up from 86.4% as of 1 January 2016. The five largest banks accounted for 56.1% of net assets as of year-end.

Results of the Clean-Up:

- Depositors can be confident their money will be available on time and in full.
- Banks will use attracted funds to lend to businesses, in particular SMEs, instead of supporting companies that belong to the bank's shareholders.
- Credit resources available for businesses have expanded.
- Lending costs are falling as attracted funds are directed to the domestic market.
- As the ownership of banks is disclosed, customers can make an informed decision on placing their trust in a bank's shareholders.
- Banks have become more resilient to macroeconomic shocks, and banks have sufficient liquidity and capital stock to ensure stable operations even in a recession.

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YEARS OF CURRENCY REFORM

In 2016, banks relied more and more on domestic sources of funding, rather than external sources of financing. Customer deposits at banks grew by UAH 94.4 billion, or 12.8%. The share of households' and businesses' funds in bank liabilities increased from 64.0% to 73.4% over the course of 2016, returning to the level of 2006, when foreign banks began expanding into Ukraine.

A key trend in the reporting year was the significant growth of corporate deposits. Businesses' account balances grew 13.7% in UAH and 10.3% in USD as the financial health of state-owned companies improved, exporters' earnings grew in the second half of the year, and bank loans were used to replenish working capital.

The gradual removal of deposit withdrawal restrictions positively impacted the public's confidence and deposit trends. As of 1 January 2017, individuals' funds at solvent banks increased 9.1% in hryvnia and 1.0% in foreign currency. The shares of corporate and retail deposits in banks' liabilities are now nearly even, at 36% and 37%, respectively, as of the end of the year⁷.

Attraction of new deposits allowed banks to repay NBU refinancing of UAH 30.2 billion. The share of NBU loans in the liabilities of financial institutions decreased from 4.6% to 2.0% in one year. Banks that needed additional capital partially converted obligations to their parent institutions (subordinated debt and interbank loans) into capital.

The improved liquidity of the banking sector on a renewed inflow of retail deposits, as well as a gradual reduction in the NBU's key policy rate from 22% to 14% throughout the year, paved the way for a decline in deposit rates. Interest rates on 12-month retail deposits decreased over the year by 3.8 pp to 17.5% in UAH and

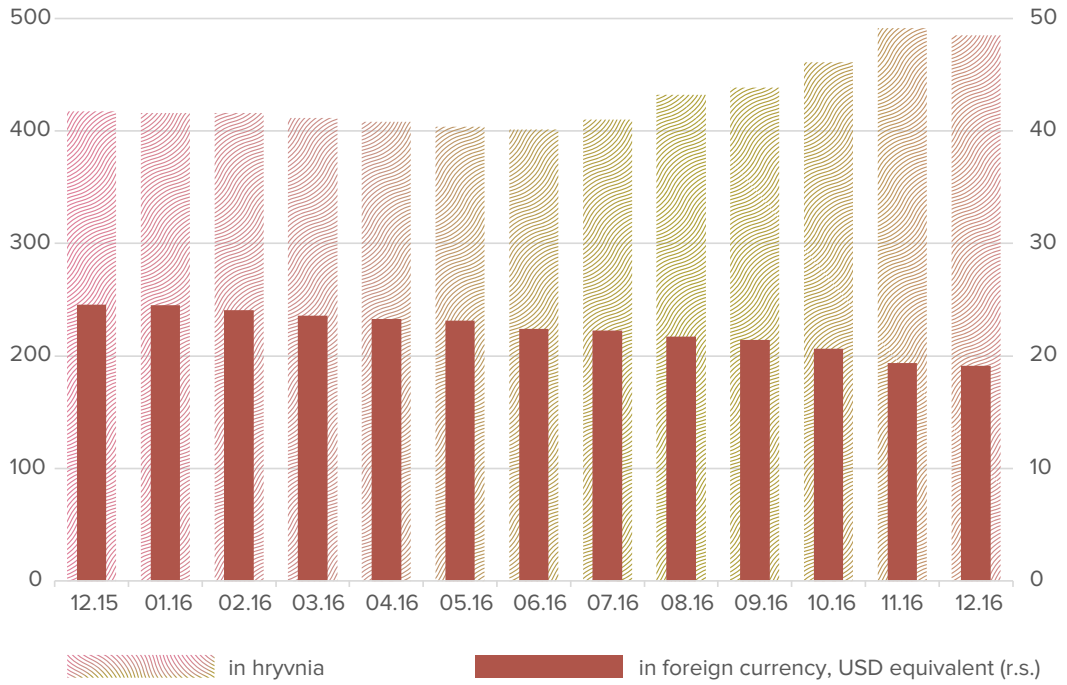
by 2.2 pp to 5.7% in USD. The cost of USD and EUR deposits reached record lows as demand from banks for FX funding remained low. In H2 2016, lower funding costs enabled banks to decrease interest rates on corporate loans by more than on retail loans. However, the cost of new loans remains high, which means they are most often taken for a short term to finance working capital.

In general, banks' lending activity remained low, especially in the first half of 2016. Including FX effects, the total corporate and retail loan portfolio of banks solvent as of 1 January 2017 decreased by 3.5%.

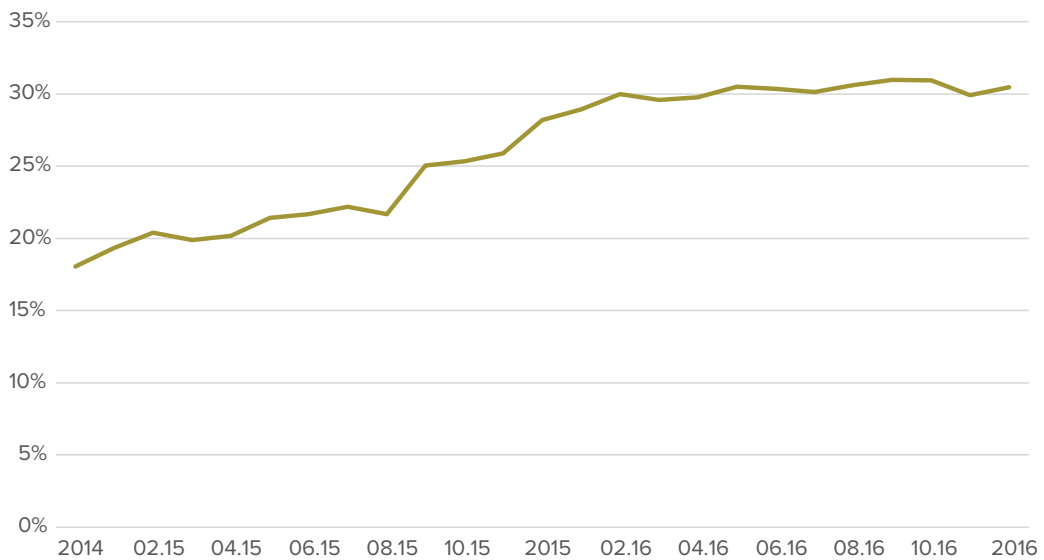
In the second half of the year, lending in hryvnia grew slightly, driven by loans by state-owned banks to state monopolies. A number of large agro-industrial companies also secured new loans. In addition, thanks to an increase in FX loan conversion to hryvnia, projections for borrowers' servicing their debts improved. In 2016, corporate loans denominated in hryvnia increased by UAH 71.8 billion, or 21%, while foreign currency loans decreased by USD 4.5 billion. The share of foreign currency loans to businesses in the overall loan portfolio decreased from 59% to 53%. Lending to households decreased in both hryvnia and in foreign currency by 10%.

Banks built up a portfolio of government securities. The combined share of investments in securities qualifying as collateral for NBU refinancing (mainly domestic sovereign bonds and NBU certificates of deposit) increased by 10.6 pp last year and stood at 24.6% of sector net assets as of the start of the year. Half of that increase was in domestic sovereign bonds issued primarily for increasing PrivatBank capital.

Loans issued by solvent banks to businesses and individuals, in billions



Share of NPLs at solvent banks⁸ for all loans



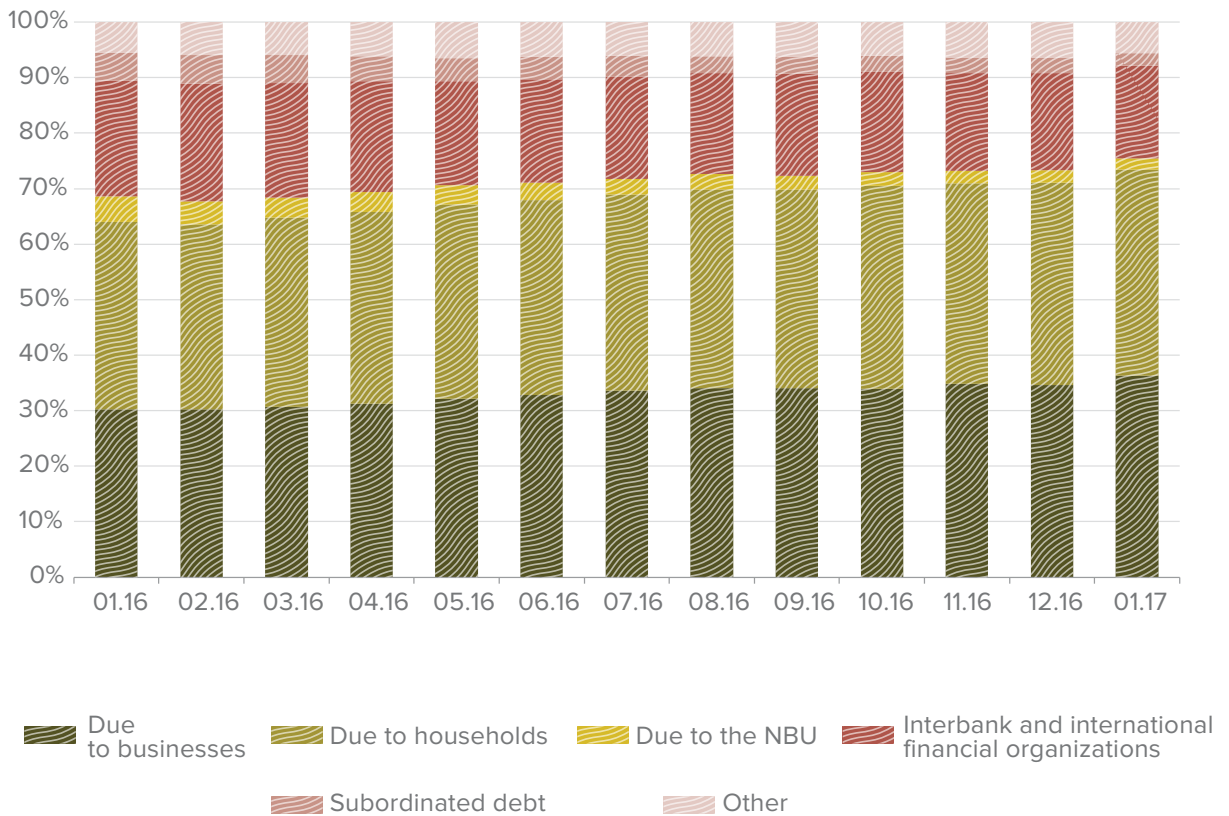
⁸ NPLs are classified according to Resolution No. 23 of the NBU Board of 25 January 2012

Problematic loans reported by banks (IV and V quality category⁹) held a 30.5% share at the end of the year (28.2% as of 1 January 2016). This is significantly lower than shown by the results of diagnostic study. Determination of the true quality of the PrivatBank loan portfolio and the banking sector's transition to new rules for assessing credit risk¹⁰ from the start of 2017 will bring the share of bad loans closer to the stress test results.

Banks solvent at the end of 2016 generated UAH 86.2 billion in operating income, 7% lower compared to 2015. Net interest

income¹¹, which accounted for 51% of operating income, declined slightly due to the high cost of funding, limited new lending, and borrowers' financial difficulties. This was offset by a modest increase in net commission income due to the recovery in demand for banking services and increase of fees for services by financial institutions. In 2016, net commission income grew 7.1% to UAH 24.2 billion. The financial result of commercial transactions decreased 62% from 2015 and was volatile throughout the year, with losses from foreign currency asset and liability revaluation in Q1 offset by income from trading securities in Q3.

Structure of bank liabilities

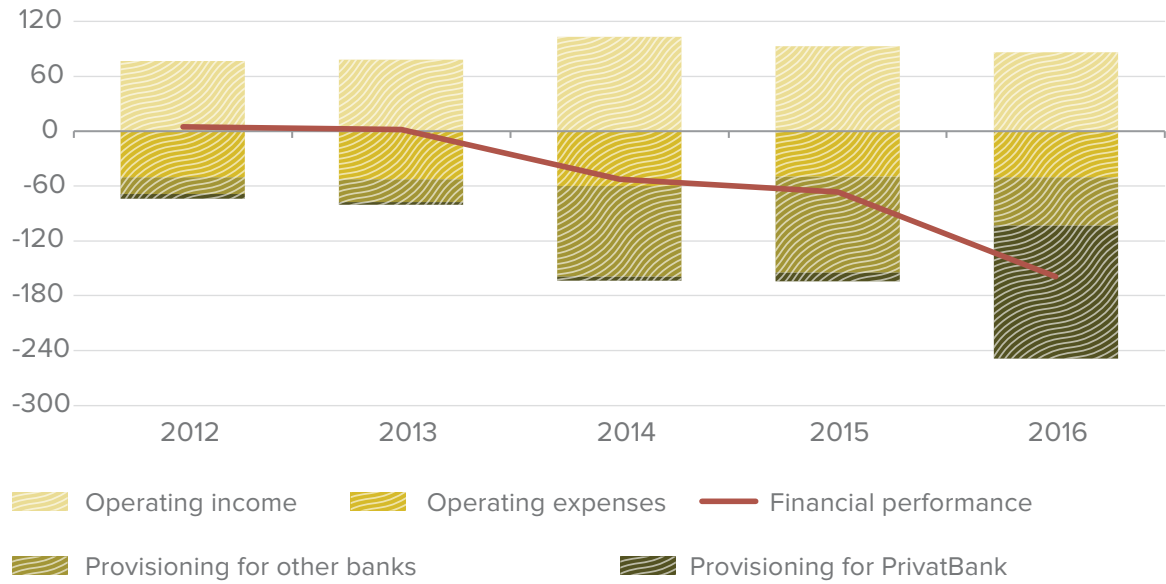


⁹ Resolution No. 23 of the NBU Board of 29 January 2012

¹⁰ Resolution No. 351 of the NBU Board of 30 June 2016. The new definition of non-performing loans is based primarily on a delay of 90 days or more

¹¹ The lack of net interest income in Q4 2015 was a one-off effect of banks transitioning to IFRS

Solvent banks' financial performance, UAH billion



In 2016, the banking sector posted a record loss of UAH 159 billion. This was primarily due to provisioning for PrivatBank’s loan portfolio of UAH 145 billion. Provisioning at the remaining banks declined compared to the previous year, and total losses decreased from UAH 66.9 billion to UAH 24.0 billion, even as financial institutions are continuing the process of recognizing asset fair value. At the same time, the sector’s pre-provisioning net profit remained positive at UAH 36.8 billion. This is a clear sign that the majority of banks are capable of generating positive net cash flow and profit.

We have finally overcome the significant shocks of the previous three years. Ukraine’s banking sector is close to resuming active lending

to the real economy and to gradually transitioning to sustainable growth. With borrowers’ profits poised to grow, their leverage will gradually return to normal. Banks are starting to plan for the long term, are starting to implement new approaches to risk management, and are seeking new customers. The completion of the clean-up of the banking sector and favorable macroeconomic conditions will allow banks to attract funds from households and businesses. Interest rates are expected to continue to decrease, making loans more accessible. The issue of creditor rights protection remains important, especially as almost no progress was made in this respect in recent years.

Bank Regulation and Supervision

Strengthening Banking Supervision and Regulation

In 2016, the NBU adopted decisive measures to enhance bank supervision, introducing risk-based tools for banking supervision. This enabled a more effective and comprehensive analysis of banking activity to drive better understanding of the state of the banking sector, and to take corrective action promptly, when needed.

In 2016, offsite supervision continued the practice of using the Early Warning System (EWS). This system identifies at an early stage banks that require additional monitoring and supervisory measures designed to reverse negative operating trends at banks.

The supervisory process was amended to bring it in-line with recommendations from the European Banking Authority. According to the EBA, an appropriate supervisory review

and evaluation process (SREP) consists of:

- classifying banks according to their significance and level of risk;
- monitoring key bank indicators;
- analyzing business models;
- evaluating corporate governance and internal control systems;
- evaluating risks that pose a threat to capital;
- evaluating risks that pose a threat to liquidity;
- evaluating the adequacy of a bank’s own capital;
- evaluating the adequacy of a bank’s liquidity;
- overall SREP evaluation;
- supervisory measures.

In 2016, the NBU classified banks according to their significance/importance to the banking system and assessed their business models. Key elements of a new SREP approach are to be introduced in mid-2018.

Risk-based supervision



In 2016, the NBU upgraded banking supervision in the following ways:

- For the first time, the regulator began testing SREP elements such as bank classification and groups of bank based on business models.
- The regulator developed a completely new format for supervisory reporting based on the Uniform Bank Performance Report (UBPR). The Uniform Report is an analytical tool designed for banking supervision and analysis. It allows for better analysis of the adequacy of a bank’s inflows, liquidity, and capital, as well as the quality of asset and liability management.
- The regulator established a Banking Supervision School and intensive cross-functional training for the school’s supervisors.
- The regulator streamlined the procedure for analytical and supervisory reporting, in particular fine-tuned supervisory analytics by introducing monthly and quarterly management reporting on the state of the banking sector.
- The NBU continued its practice of a regular dialog with banking sector participants to clarify changes in regulatory acts pertaining to supervision.
- The regulator improved the rating system for banks based on the results of CAMELS inspections, adding an “O” component and updating the assessment criteria.

Comparing traditional and risk-based approaches to supervision

Traditional approach	Risk-based approach
Transaction-based approach	Process-based approach
Total monitoring of all banks	Supervision based on the principle of proportionality (adequacy) – supervisory measures proportionate to the significance of a bank and its risk profile
Standard procedures	Procedures are determined by the risk profile
Historical indicators	Projected indicators

Updated Approach to Credit Risk Assessment

The regulator completed work on a new approach to assessing banks' credit risks, introducing the Regulation for Measuring Credit Risk Generated by Banks' Asset Operations approved by Resolution No. 351 of the NBU Board of 30 June 2016.

The new approach is in line with international standards and is based on the Basel Core Principles for effective banking supervision. It is also consistent with IFRS 9 (Financial Instruments), which requires the measurement of expected losses from financial instruments and which is scheduled to come into effect internationally from 1 January 2018.

The revised approach towards credit risk assessment aims to ensure the proper and timely assessment of bank credit risk, which will contribute to the reliable calculation of capital and ultimately improve the banking sector's financial stability.

The regulation was developed over the course of more than a year through the joint efforts of the banking community, experts from the IMF, the World Bank, global consulting firm Oliver Wyman, and USAID.

The new approach features clear and detailed rules and general principles for credit risk assessment, which allows banks and regulators to rely on a fact-based approach. The rules will force banks to recognize low quality assets.

To calculate the amount of an expected loss, the regulation stipulates the use of a formula recommended by the Basel Committee on Banking Supervision, which includes three components: probability of default (PD), loss given default (LGD), and exposure at default (EAD). The approaches outlined in the regulation take into consideration

the NBU's conclusions regarding credit risk assessments by banks, including based on the results of diagnostic study of banks.

The regulation also establishes:

- the use of a standardized approach to evaluating the financial standing of bank borrowers (econometric scoring models for corporate debtors and a list of qualitative and quantitative indicators for other debtors)
- the possibility to assess borrowers' credit risk based on the characteristics of a group of companies to which the borrower is related through control functions and shared business risk. The financial standing of a group of companies can improve or worsen the evaluation of a corporate borrower's credit risk
- other factors that help ascertain the degree of credit risk (especially the borrower's timely servicing of debt). The emergence of signs indicating high credit risk would result in a downgrade of the loan quality category even if the econometric scoring model deemed the loan high quality
- the expansion of a group-based (portfolio-based) evaluation of assets and the determination of major criteria of an evaluation. Banks evaluate loans to households and individuals of up to UAH 2 million on a portfolio basis
- updated requirements for acceptable collateral and terms for accepting them. In particular, property rights (except for deposit rights) have been excluded from the list of collateral accepted by banks when determining credit risk levels.

The regulation was tested in close cooperation with the banking community from 1 September 2016 and its implementation was required from 3 January 2017.

Additional Capitalization of Banks

Based on the results of the diagnostic study, offsite supervision monitored the implementation of approved capitalization programs and the evaluation of the effectiveness of measures undertaken by banks.

In 2016, to help reduce capital needs, the NBU allowed banks to consider decreasing credit risk on the basis of the following actions:

- the repayment of debt under problem loans

including through the disposal of a pledgee's rights by the bank

- submitting additional quality collateral under the loans.

Previously, banks had increased capital mostly by injecting funds and/or converting debt into capital in the bank.

As of 1 January 2017, the State Register of Banks included 182 banks, of which 99 held banking licenses and one (Rodovid Bank JSC) held a remedial bank license.

Registration and licensing of banks by the NBU

Records from the State Register of Banks	Quantity
Registered branches of Ukrainian banks operating in Ukraine	91
Operational branches of Ukrainian banks operating in Ukraine	89
Operational representative offices of Ukrainian banks	8
operating in Ukraine	5
operating abroad	3
Registered branches of Ukrainian banks operating in Ukraine	11,823
Operational branches of Ukrainian banks operating in Ukraine	10,256
Standalone units of Ukrainian banks operating in Ukraine that were closed:	
Representative offices	1
Regional offices	16
Branches	2,530
Newly opened standalone units of Ukrainian banks operating in Ukraine:	
Representative offices	0
Regional offices	0
Branches	415

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YEARS OF CURRENCY REFORM

In 2016, NBU regulations were amended to improve the procedure for approving bank managers, streamlining the process for

reviewing documents, and transitioning from a form to a substance approach during bank licensing by the NBU.

Consideration of applications

Process	Number of applications considered	Permissions granted/ approvals	Permissions not granted/refusals
Approval of new appointments and assessments of the professionalism and reputation of bank managers	592	411	45
Consideration of notices from banks on engaging in new activity and/or offering new financial services ¹²	11	7	3
Granting licenses to banks after a change of name ¹³	4	4	–
Accreditation of representative offices of foreign banks in Ukraine, approval of changes to their regulations, cancellation of accreditation of a representative office of foreign banks in Ukraine	6	3 ¹⁴	–

¹² In 2016, banks mostly requested permits for cash collection

¹³ Change of names:
 AP BANK PJSC to AGROPROSPERIS BANK PJSC
 Agrocombank PJSC to Ibox Bank PJSC
 NEOS BANK PJSC to Altbank JSC
 RWS Bank lost the status of a bridge bank and changed its name

¹⁴ Cancelled accreditation:
 A representative office of CenterCredit Bank JSC in Kyiv (2 September 2016)
 A representative office of Trust Commercial Bank JSC (30 December 2016)

Approving a bank's charter

Documents required for charter approval	2016	2015
Applications received:		
total	126	184
regarding an authorized capital increase	76	60
Changes to charters approved:		
total	102	159
regarding an authorized capital increase	60	49
Changes to charters not approved:		
total	2	0
regarding an authorized capital increase	2	0
Applications returned	21	16

In 2016, the NBU received 126 applications for changes to charters, of which 102 were approved.

New banks must have authorized capital of no less than UAH 500 million and existing banks of no less than UAH 120 million.

The NBU has established a schedule out to July 2024 for the gradual increase of authorized capital at existing banks to at least UAH 500 million. As per the schedule, from 11 July 2017 the authorized capital of all banks must be no less than UAH 200 million.

Changes in authorized capital

Authorized capital amount	01.01.2015	01.01.2016	01.01.2017
Number of licensed banks	163	120	100
of which:			
authorized capital of less than UAH 120 million	30	28	1
authorized capital of between UAH 120 million and UAH 200 million	46	30	42
authorized capital of between UAH 201 million and UAH 300 million	25	18	16
authorized capital of between UAH 301 million and UAH 500 million	21	13	11
authorized capital of UAH 501 million and more	41	31	30

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YEARS OF CURRENCY REFORM

Supervision of the owners of banks

In 2016, the NBU:	Number
received applications to acquire qualifying holding	70 applications
approved acquisitions of qualifying holding	for 31 applicants
rejected acquisition of qualifying holding	for 13 applicants
returned applications for acquisition of qualifying holding to applicants	for 16 applicants
imposed penalties for acquiring qualifying holding without approval	on 2 applicants
has not completed consideration	10 applications

In 2016, the NBU added seven banks to the list of assuming banks. Those banks will be able to participate in auctions of insolvent banks' assets. The auctions are carried out by the Deposit Guarantee Fund.

In 2016, the NBU also added one bank and one individual to the list as investors. Investors can participate in bids to acquire insolvent or bridge banks.

Supervision of the Transparency of Banks' Ownership Structures

In 2016, the NBU pushed for the disclosure of the owners of all banks. During the year, the regulator examined the ownership structures of 21 banks in terms of transparency. In particular, the NBU requested from 17 qualifying shareholders of 9 banks to confirm whether their financial positions meet requirements. The NBU levied penalties on two

banks for failing to disclose to the regulator their ownership structure on time.

In 2016, the regulator liquidated four banks owing to opaque ownership structures:

- TK Credit PJSC
- Bank Unison PJSC
- Smartbank PJSC
- Classicbank PJSC.

Courts upheld the legality of the NBU's decision to declare TK Credit PJSC and Bank Unison PJSC insolvent due to non-transparent ownership structures.

In 2016, the NBU issued licenses for foreign exchange operations to 10 banks and 22 non-bank financial institutions. Eleven non-bank financial institutions had their general licenses cancelled.

General licenses for foreign exchange operations

In 2016, the NBU issued	Number of banks	Number of non-bank financial institutions
New general licenses for foreign exchange transactions, including	10	22
Due to an expanded list of foreign exchange operations permitted	8	–
Due to bank name changes	2	–
New general licenses re-issued without an address indicated	15	–
Licenses for foreign exchange operations	–	11

In 2016, the NBU recognized six banking groups:

- Trust Capital
- Raiffeisen Bank Aval
- Alfa Bank
- Industrialbank
- Industrial and Financial Bank
- Ukrconstinvestbank.

As of 31 December 2016, 19 banking groups were operating in Ukraine.

Throughout 2016, the NBU developed new ways of identifying members of banking groups and identification principles. In doing so, the regulator relied on its experience in supervising banking groups.

In 2017, the NBU plans to approve these methods, which will help enhance the consolidated supervision of banks and improve the entire banking system's transparency and stability.

Supervision of Banking Groups

In 2016, the NBU	Number of banking groups
Recognized	6
Approved changes in ownership structure	5
Derecognized	2
Considered applications to become a controller	5

Related Party Diagnostics

The NBU completed the first stage of identifying banks' related parties and began gradually decreasing banks' dependence on these

parties. Diagnostic study of banks was launched in May 2015, using best global practices based on a single methodological approach. The tests yielded the real volume of lending to related parties within the banking system.

Results of the related parties diagnostic study

	Number of banks as of 1 January 2017
Banks that completed the study	99
Banks that exceeded in ratio limits, of which	44
Bank were removed from the market	4
Banks met the ratio	4
The regulator approved three-year plans to unwind related-party exposures	8
Three-year plans to unwind related-party exposures under consideration by the regulator	15
Three-year plans to unwind related-party exposures under development	13

In total, 99 banks were tested over 2015 to 2016. The tests were conducted at 18 of the 20 largest banks in 2015, with another 81 undergoing diagnostics in 2016. As a result, 65 banks were asked to include information specifying asset-side operations with related parties in specified reports. Another 44 banks exceeded the maximum allowed credit exposure to related parties.

After the tests, banks introduced more effective mechanisms for identifying related parties, which is expected to help crack down on lending.

To enhance monitoring of related parties, the NBU in 2016:

- introduced a new statistical reporting form. This enabled an improvement in the

NBU's prudential functions in terms of related parties' transactions;

- amended the regulation on identifying a bank's related parties, approved by Resolution No. 315 of the NBU Board of 12 May 2015 (with amendments). With the changes, the NBU expanded the list of criteria to be used in identifying individuals and legal entities as parties related to a bank.

The second stage of the process is to be launched in 2017, aimed at identifying banks' related parties and gradually unwinding related party lending. Process overview:

- monitoring banks' compliance with the established plans to unwind exposures. Corrective measures may be applied to banks that fail to carry out the plans;

- comprehensively monitoring banks' related parties, including monitoring new borrowers and the transactions with them conducted by banks after the completion of diagnostic study;
- analysis and criteria for defining the terms of transactions with related parties that are not currently accepted market terms, and amending regulations.

Changes to the Regulatory Framework

To ensure the effective implementation of planned changes in the banking sector, the Board of the National Bank of Ukraine adopted a number of important resolutions in 2016. Details:

- NBU Board Resolution No. 59 of 4 February 2016 *On Diagnostic Study of Banks*, to improve the mechanism of diagnostic study of the 40 largest banks by assets
- NBU Board Resolution No. 311 of 10 May 2016 *On Approval of the Regulation on Internal Audit Guidelines for Ukrainian Banks*, to improve corporate governance at banks, in particular in terms of strengthened control over audit functions
- NBU Board Resolution No. 338 of 3 June 2016 *On Approval of Amendments to the Instructions on the Procedure for Regulating Bank Activities in Ukraine*, to strengthen the capitalization of banks
- NBU Board Resolution No. 351 of 30 June 2016 approving *The Regulation for Measuring Credit Risk Generated by Banks' Asset Operations*, for a comprehensive and timely assessment of credit risk by banks
- NBU Board Resolution No. 362 of 22 July 2016, amending the Regulation *On Identifying a Bank's Related Parties*, to clarify the characteristics by which individuals and companies can be deemed related to banks and monitoring asset operations with them
- NBU Board Resolution No. 395 of 18 October 2016 *On Approval of Amendments to the Regulation on the Rules Governing Registration and Licensing of Banks and Opening of Standalone Units*, to improve the procedure for appointing bank managers and to optimize registration and licensing procedures.

In 2016 to further strengthen banking regulation and supervision, amendments were made to the Regulation *On The Use of Tools of Influence by the National Bank of Ukraine*, approved by Resolution No. 346 of the NBU Board of 17 August 2012, including:

- Resolution No. 336 of the NBU Board of 30 May 2016 authorizes the NBU to declare a bank as problematic if its authorized capital does not adhere to Ukrainian law
- Resolution No. 365 of the NBU Board of 2 August 2016 expands the list and clarifies the wording of certain signs of risky activity by banks in financial monitoring
- Resolution No. 374 of the NBU Board of 19 August 2016 improved the procedure for the application of certain enforcement measures, in particular the methodology for calculating selected penalties (failure to submit/failure to submit in a timely manner, misreporting of statistics, non-compliance with reserve requirements, failure to submit credible information/failure to submit information on the ownership structure in a timely manner). In addition, the list of criteria for a bank to qualify as problematic was expanded and provisions regulating the activities of an NBU-appointed administrator have been streamlined in order to enhance the efficiency of the special monitoring of the bank's activities.

As part of the joint project Paperless Banking by the National Bank of Ukraine and the Independent Association of Banks of Ukraine and with the goal of eliminating red tape in the system of foreign exchange control, the NBU Board in 2016 adopted:

- Resolution No. 347 of the NBU Board of 16 June 2016 amending *Instructions on the Procedure for Controlling Export/Import Operations*, and streamlining relations between banks, customers, and public officials
- Resolution No. 383 of the NBU Board of 7 September 2016 expanding the list of reasons for inspections of compliance with foreign exchange legislation and specifying inspection procedures.

In addition, in 2016 the National Bank of Ukraine together with the World Bank developed a road map for improving banking supervision. The roadmap will be implemented in 2017-2019 and will further improve banking regulation and supervision.

Reorganizing Off-Site Banking Supervision

In 2016, the regulator completed prudential supervision reforms. In the reorganization of the NBU's Banking Supervision Department, the functions of supervisors and curators of similar banking groups were merged. The department was also given diagnostic and stress testing functions. The department's new organizational structure complies with the principle of proportionality/adequacy of SREP guidelines. This means the frequency, depth, and intensity of supervision will depend on the level of a bank's systemic importance and will correspond to their risks and the possible impact on the stability of the entire banking system.

The new structure integrates audit report analysis and supervision and implements a single window for interacting with law enforcement bodies. In 2016, the NBU provided to law enforcement bodies 155 cases of investigations of criminal offences in the banking sector. Last year, the NBU worked most actively with the Office of the Prosecutor General and the National Police of Ukraine.

Improving Methods and Procedures for Bank Inspections

Bank inspections remained one of the main methods of banking supervision.

In 2016, the NBU's inspectors carried out 84 inspections of 60 banks. The Inspection Department of the National Bank of Ukraine also allocated substantial resources to evaluate asset quality as part of the first stage of bank diagnostics.

Quantitative distribution of inspections

Inspections	Quantity
Scheduled	34
Unscheduled, including:	50
inspections as part of bank diagnostics	41
inspections related to the fulfillment of obligations under loan agreements with the NBU	6
inspections initiated based on the results of off-site banking supervision within the framework of special monitoring at a bank	2
inspection of a bridge bank to assess the investor's progress in bringing the bank into compliance with banking legislation	1

Scheduled inspections over 1 January – 31 October 2016 assessed banks' operations using the CAMELS rating system, as well as the quality of their operational risk

management. Starting 1 November, the updated CAMELSO rating system was used to assess bank activity during scheduled inspections.

Recommendations to banks based on the findings of the inspections

Recommendations to Banks Based on the Findings of the Inspections	in UAH billion
Based on the findings of the 1st stage of diagnostic study of banks in terms of the adjustment (increase) in credit risk	8.6
Based on the findings of comprehensive bank inspections	
Regarding the adjustment (increase) of regulatory capital	67.9
Regarding the increase of uncovered credit exposure	59.1
Regarding the adjustment (decrease) of banks' financial performance	1.7

Comparison of rating systems

CAMELS-2007	CAMELSO-2016
Components	
C – Capital adequacy ratio	C – Capital
A – Asset quality	A – Asset quality
M – Management	M – Management and corporate governance
E – Earnings	E – Earnings
L – Liquidity	L – Liquidity
S – Sensitivity to market risk	S – Sensitivity to market risk
	O – Operational risk introducing the operational risk factor – indicators and criteria for assessing operational and informational risks
Assessment	
<ul style="list-style-type: none"> • qualitative indicators, five-point scale • tendency towards subjective averaging of ratings by components (a rating of 3 is average) 	<ul style="list-style-type: none"> • shifting to a four-point scale to assess components in order to avoid the use of average indicators • implemented quantitative indicators and elaborated qualitative indicators • applied a weight component (for the weight of components in the general rating and the individual indicators of each defined component)

The new CAMELSO rating system has additional advantages: the assessment of corporate governance, internal and external audits, internal control systems, and risk management systems in light of recommendations by the Basel Committee and International Internal Audit Standards.

The new rating system eliminates the risk of a subjective decision on a bank assessment.

Detailed criteria for indicators of CAMELSO components enable comprehensive assessment of a bank’s financial standing, level, nature and peculiarities of its risks, quality of corporate governance, effectiveness of risk management and internal control systems.

CAMELSO is a tool aimed at defining the supervision strategy and forms the grounds for developing SREP grades.

Standardizing and Detailing Methodological Procedures

In 2016, inspection procedures received a major update. Details:

- developed and implemented standardized and detailed methodological procedures for inspecting a bank's business lines to replace outdated ones
- developed and implemented a procedure for organizing, planning, conducting, and formalizing the results of inspections. The procedure sets internal procedures for interactions between employees of the Inspection Department during any stage of an inspection
- launched "AutoAudit" software to optimize the use of digital inspection documentation
- improved assessments of the completeness and quality of banks meeting the recommendations of inspections (follow-up to recommendations)
- brought the format structure of the Inspection Report and Inspection Statement into compliance with the NBU's improved corporate standards
- optimized and improved the process of using digital inspection documents. Created additional possibilities for saving electronic documents provided by banks and created during the inspection process.

Introduced appraisals of inspectors' performance to improve the quality of inspections and ensure effective control and motivation.

Prevention and Counteraction of the Legalization (Laundering) of Proceeds from Criminal Activity, Terrorism Financing, and the Question of Compliance with Ukrainian FX laws

In 2016, the National Bank of Ukraine worked according to the Action Plan for 2016 for the Prevention and Counteraction of the Legalization (Laundering) of Proceeds from Criminal Activity, Terrorism Financing, and Financing the Proliferation of Weapons

of Mass Destruction (hereafter: the legalization of the proceeds of criminal activity/terrorism financing), approved by Resolution No. 103 of the National Bank of Ukraine and the Cabinet of Ministers of Ukraine of 11 February 2016.

The NBU took part in Ukraine's first national assessment of risks from the legalization (laundering) of proceeds from criminal activity and terrorism financing covering the period of 2013-2015.

In 2016, the NBU improved its legal framework for preventing and combating money laundering/financing of terrorism – the NBU adopted six and amended five resolutions of the NBU Board. These included:

- Resolution No. 191 of the NBU Board of 24 March 2016 approving the methodology for assessing the risks of using a bank or a foreign bank branch to legalize the proceeds from criminal activity/financing of terrorism and related to a politically exposed person.
- Resolution No. 193 of the NBU Board of 24 March 2016 approving methodological recommendations on carrying out inspections of banks, their standalone units, and branches of foreign banks to assess the sufficiency of measures taken with respect to identification, verification, and know your customer requirements.
- Resolution No. 194 of the NBU Board of 24 March 2016 approving methodological recommendations on carrying out inspections of banks, their standalone units and branches of foreign banks to assess the sufficiency of measures taken with respect to risks related to politically exposed persons.
- Resolution No. 388 of the NBU Board of 15 September 2016 approving a regulation on financial monitoring by non-bank financial institutions regarding transfers of funds.

The following documents were amended:

- Resolution No. 417 of the NBU Board of 26 June 2015 *On the Implementation of Financial Monitoring by Banks.*

- Resolution No. 247 of the NBU Board of 7 April 2016 *On the Procedure for Compiling Registers by Banks.*

These changes are designed to introduce international standards for countering money laundering, terrorist financing, and proliferation of weapons of mass destruction elaborated by the Financial Action Task Force on Money Laundering (FATF) and taken from EU Directive 2015/849 of the European Parliament and the Money Laundering and Terrorist Financing Council, as well as from recommendations of the IMF.

In 2016, at the request of the State Financial Monitoring Service of Ukraine, the NBU provided an analysis of the current state of and improvement of the system for the prevention and combating of money laundering/terrorism financing. The materials were used to prepare the plenary meetings of the Committee of Experts on the Evaluation

of Anti-Money Laundering Measures and the Financing of Terrorism (MONEYVAL).

In preparation for Ukraine's fifth round of assessment on preventing and combating money laundering/terrorism financing, the NBU provided information to the State Financial Monitoring Service of Ukraine for MONEYVAL assessment questionnaires (on the technical adequacy and effectiveness of anti-money laundering). NBU representatives also participated in the 50th and 52nd MONEYVAL meetings as part of the Ukrainian government delegation.

In 2016, NBU experts performed 44 on-site inspections of banks (41 scheduled and 3 unscheduled) of their compliance with legislation and regulations, and also compiled 46 off-site supervision reports (44 banks and 2 non-bank financial institutions).

Findings from the inspections of banks and non-bank financial institutions

Indicator	2016
Number of inspections of banks/non-bank institutions (units), including:	88 / 2
scheduled on-site	41 / 0
unscheduled on-site	3 / 0
off-site supervision reports	44 / 2
Number of banks/non-bank institutions with violations (units), including:	59
banks	57
standalone units of banks	0
non-bank financial institutions	2

In 2016, the NBU conducted 350 inspections on compliance with Ukraine's currency legislation, including 44 off-site inspections and 270 inspections of cash desks at non-bank financial institutions and their units.

The NBU considered over 127 applications, inspection results, and other information from government agencies and law enforcement agencies responsible for foreign exchange control on compliance with Ukrainian laws

during foreign exchange transactions by banks and financial institutions.

In 2016, based on the findings of on-site inspections and off-site supervision of financial monitoring, the NBU provided to law enforcement authorities information on the financial transactions of customers of over 40 banks and 2 non-bank financial institutions. The information provided to law enforcement authorities pertained to large cash

transactions by customers, transfers of funds abroad that could indicate the extraction of capital out of the country.

Based on the violations, the NBU imposed corrective measures/sanctions (appropriate to the violation or the level of threat to the bank's creditors and depositors), including in the form of fines, written warnings, reports of foreign exchange legislation violations, as well as the revocation of banking licenses and the liquidation of a bank.

In 2016, courts ruled in the NBU's favor on two lawsuits regarding regulatory decisions made in 2014 to classify banks as insolvent for high-risk activities in the area of financial monitoring and systematic legislative violations.

Starting in August 2016, the National Bank of Ukraine on a monthly basis began making information public on the corrective measures applied to a bank for violating financial monitoring legislation. The information is published in the Financial Monitoring section of the NBU's website.

Corrective measures/sanctions for breaches of financial monitoring and foreign exchange control laws in 2016

Indicator	Quantity
Warning letter	44
Fine imposed on a bank	33 decisions totaling UAH 9,557,920.74
Limitation, termination, or suspension of certain operations performed by a bank	2
Temporarily removing a bank official from their position until corrective action has been taken	1 (two officials removed)
Revoking a banking license and liquidating a bank ¹⁶	4
Written requirement for banks to stop (and prevent further) breaches of the law	51
Report on breaches of foreign exchange legislation	192
Resolution on accountability for breaches of foreign exchange legislation	206 totaling UAH 3,302,369.13

In addition, enforcement measures, adequate to the degree of the violation, were applied to banks and officials, including in the form of written warnings, written agreements, fines imposed on a bank, and administrative sanctions against a bank.

Two notifications were sent to law enforcement agencies concerning financial transactions that may contain signs of a criminal offense.

Fines based on inspection findings

Fines based on inspection findings	Accrued, UAH million	Paid, UAH million	The main basis for imposing fines/administrative sanctions
Imposing fines on banks	2.9	2.9	<ul style="list-style-type: none"> Failure to comply with regulations on regulating bank activities
Administrative sanctions imposed on 22 officials	0.7	0.7	<ul style="list-style-type: none"> Submitting false and/or incomplete reporting to the NBU Performing high-risk activities that pose a threat to the interests of depositors or a bank's other creditors
Total	3.6	3.6	–

Off-Site Supervision Enforcement Measures

In 2016, off-site supervision applied 158 enforcement measures to banks. Owing to the measures taken to improve their financial standing, seven of the 25 banks declared

problematic in 2016 had that status withdrawn and are now operating in the market. When the designation was withdrawn from those seven banks, all had fulfilled financial rehabilitation plans but showed different degrees of stabilization, so they remained under special control of the NBU.

Corrective measures applied to banks by the NBU in 2016

Type of corrective measure	Number of corrective measures ¹⁷	Number of banks
Warning letter	55	39
Declaring a bank problematic ¹⁷	26	25
Introduction of a special control regime and appointment of a curator	24	21
Fines imposed on a bank	18	18
Fines imposed on officials or owners of material stakes	14	8
Written agreement	12	12
Restrictions on or termination of transactions imposed	9	9

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¹⁷ In a given year, the same type of measure can be applied to a bank several times

Improving Audit Services

In 2016, the National Bank of Ukraine conducted a detailed analysis of audit firms' reports on the audits of the annual financial statements of 100 banks.

Because of violations of Ukrainian laws and NBU regulations, the Committee on the Audit of Ukrainian Banks excluded one firm from the Register of Auditors. Another firm was excluded from the Register of Auditors by personal request. In 2016, the Committee on the Audit of Ukrainian Banks added two firms to the Register of Auditors.

Next Steps

In 2017, the National Bank of Ukraine will focus its efforts on:

- the continued implementation of banks' capitalization strategies
- completing the diagnostic study and stress testing of the remaining banks to ensure that only reliable banks operating properly are active in the banking sector
- reducing excessive lending to banks' related parties
- creating the NBU Credit Register, which will enable early identification and prevention of risk concentration among problematic borrowers in the banking sector,

and for banks to be aware of loan servicing quality by the same borrower at different banks

- analyzing the viability of business models and modeling and forecasting bank performance indicators
- analyzing banks' corporate governance and internal control systems
- assessing capital risks and the adequacy of capital to cover them
- assessing liquidity risk and funding risk
- assessing risk related to banking groups and banks' beneficial owners.

Recommendations to Banks for 2017

- review and enhance internal risk management frameworks. Banks should focus efforts on improving asset quality, particularly the quality of the loan portfolio, rather than competing for market share
- adjust business models to new conditions. Banks that are unable to generate operating profit should take decisive and prompt action to restructure their business and substantially cut operating expenses
- execute approved capitalization programs and restructuring plans developed based on the findings of the diagnostic study.

Participation in the Financial Stability Board

In 2016, the Financial Stability Board (FSB) met six times to discuss issues related to the financial sector and the economy and ways to mitigate risks and increase financial system stability.

The FSB was established by presidential decree in March 2015. The FSB is headed by the governor of the National Bank of Ukraine and the minister of finance of Ukraine, and the membership is made up of the head of the National Securities and Stock Market Commission, the head of the National Financial Services Commission, the managing director of the Deposit Guarantee Fund, a deputy governor of the National Bank of Ukraine, and a deputy minister of finance of Ukraine. The FSB provides a forum for the professional discussion of systemic risks that pose a threat to the country's financial stability. The FSB published its first report in early May 2016.

A focus on professional discussions was key to the effectiveness of the FSB. The FSB has been monitoring and performing a systemic analysis of risks to the financial sector. This enables valuable discussions and prudent recommendations.

In light of the gradual macroeconomic stabilization in Ukraine, the members of the FSB support the NBU's policy towards a gradual liberalization of FX regulation. In particular, last year the NBU proposed easing restrictions on the repatriation of dividends and eliminating the 2% pension charge on FX purchases; the FSB supported the proposals. The NBU allowed the repatriation of dividends accrued to foreign investors in 2014-2015, and foreign investors received USD 890 million in dividends, including USD 714 million in FX purchased in the interbank FX market. At the end of the year, the Verkhovna Rada cancelled the pension insurance charge on FX cash purchases. At the same time, in order to prevent a destabilization of the FX market, the NBU maintained a number of FX restrictions that had been introduced earlier.

Recognizing the systemic importance of state-owned banks, the FSB regularly discusses issues related to their operations and provides recommendations. Based on these recommendations, the Ministry of Finance plans to introduce best global practices of corporate governance at state-owned banks, establish independent supervisory boards and do so transparently, and launch preparations to attract foreign investment into the capital of these banks.

The FSB has agreed on a list of laws needed to speed up financial sector reform and has called on members of parliament to adopt those laws as soon as possible.

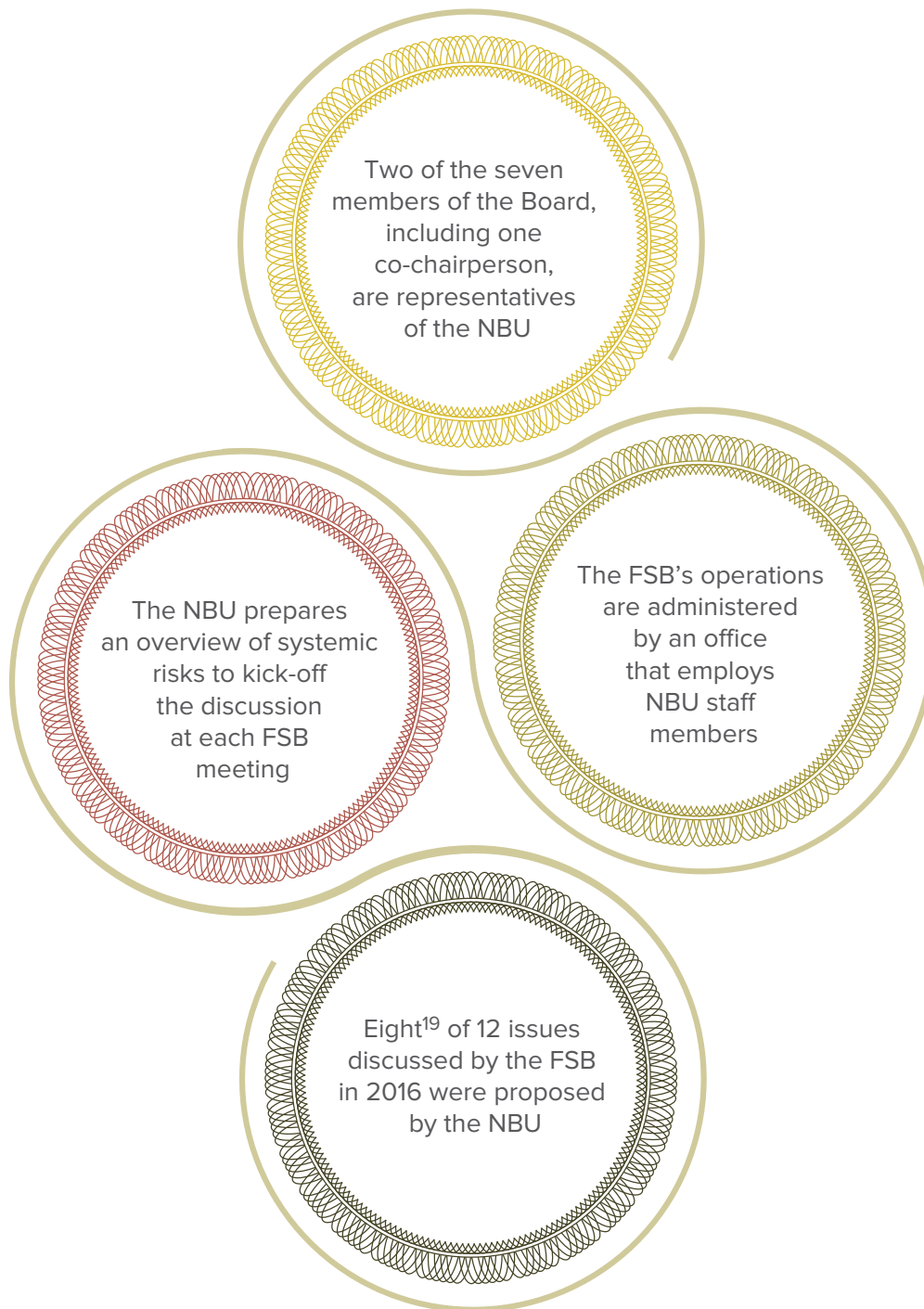
Steps to strengthen the Deposit Guarantee Fund's (DGF) institutional capacity were an important achievement of the FSB. In the coming years, the DGF will focus on selling the assets of failed banks and reforming household deposit guarantee systems.

At the end of last year, CB PrivatBank PJSC, a systemically important institution, faced growing financial problems that piled up over many years, primarily due to: imprudent lending policies by the bank, which led to capital losses. The NBU spent more than two years negotiating the development and implementation of a re-capitalization plan with the bank's shareholder. The plan was not executed. The NBU identified a total capital need at PrivatBank of UAH 148 billion.

This situation threatened the financial system with instability and potential losses for the bank's clients. Having conducted a thorough risk assessment, the members of the FSB agreed to the NBU's proposal to support the appeal by the bank's owners to transfer the bank over to the state and the Ministry of Finance as the representative of the state¹⁸. The NBU quickly formed a transition balance sheet and required provisions, arranged an additional share issue, amended the bank's charter, and completed all the required actions to sell shares and replace the bank's owners. The state then became 100% owner of PrivatBank shares. This enabled the bank to meet all of its obligations to clients.

¹⁸ In accordance with the Law of Ukraine On Households Deposit Guarantee System

Facts about the NBU's work in the Financial Stability Board



¹⁹ This does not include the standing issue of systemic risk

Development of Payment Systems and Settlements

First Deputy Governor of the National Bank of Ukraine Yakiv Smolii



“Last year, Ukraine celebrated the 20th anniversary of an important event in our country’s history, the introduction of Ukraine’s national currency, the hryvnia. The currency reform of 1996 was an important task and a serious challenge for Ukraine, since it required a massive combined political, organizational, productive, and methodological effort. And that mission was successfully accomplished”

Twenty years later, the NBU capably ensures the circulation of cash, which is a central bank’s core function. In carrying out this function, the central bank ensures the supply of banknotes and coins of all denominations in an amount that enables the processing of payments for goods and services.

Adapting to evolving needs, we are modernizing, working to improve the security of our national currency, and adopting innovative global technologies. To that end, on 11 April 2016, the new generation 500-hryvnia note entered into circulation.

In my opinion, a valuable and important step in the development of the hryvnia was the shift to Ukrainian flax fibers in the paper used for banknotes. This not only increased the strength and durability of today’s banknotes by 5-10%, but also reduced their production cost thanks to the significantly lower cost for domestic raw linen than for imported cotton fiber. In addition, the shift will also support domestic producers.

That innovation was used in the production of commemorative 20-hryvnia banknotes to mark the 160th anniversary of the birth of the famous Ukrainian writer Ivan Franko. Those notes entered into circulation on 1 September 2016.

Along with that, the development of cashless payments was a key strategic focus for Ukraine’s financial sector. The NBU continues to work on building up a cashless economy, especially by expanding of the scope of cashless payments and payment infrastructure (the Cashless Economy project).

In 2016, the share of cashless payments grew to 35.5% from 31.0% at the start of the year, while the level of cash in the economy decreased to 13.8% from 14.3% at the start of 2016.

Over the course of 2016, the number of active payment cards and the volume of cashless payments also increased.

As of the start of 2017, 45 payment systems and 39 money transfer systems were operating in Ukraine. The stability of the financial system depends on their effective operation.

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The NBU's electronic payments system offers a reliable medium for local currency interbank transfers.

An important link in this chain was the development of the PROSTIR Ukrainian Payment Area (in Ukrainian, "area" is translated as "prostir").

In 2016, seven new banks and two independent processing centers joined the NPS PROSTIR. Through the tireless work of the members of NPS PROSTIR, a large number of projects were implemented, including: contactless payments and intrabank card-to-card transfers using PROSTIR cards issued by Oshchadbank JSC, the issue of electronic IDs for internally displaced persons (IDPs) based on PROSTIR cards with NFC capability, updated and simplified usage rates, a new website, and more.

The NBU's efforts will continue to focus on increasing the share of cashless payments and optimizing cash flow. Our goal under the Comprehensive Program of Ukrainian Financial Sector Development until 2020 is to reduce cash in the economy (the M0-to-GDP ratio) to 9.5% as of 2020.

Cashless Economy is a massive project that will bring together all market participants and government institutions. The project will bring our living standards up to European levels, help Ukrainian businesses boost productivity, and make our economy more transparent.

Digitalization, IT technologies, and the need for convenient and safe money transfers are all realities of the 21st century.

Building a Cashless Economy

The NBU approved the Comprehensive Program of Ukrainian Financial Sector Development Until 2020 (known as the Comprehensive Program). A key area is the further development of cashless payments, financial market infrastructure, and oversight (A9. The Cashless Economy Project), which will develop payment infrastructure and gradually reduce the use of cash in favor of cashless transactions.

Ukraine has a high level of cash in its economy and its need for cash has only grown since independence. The country's cash withdrawal infrastructure is well-developed, but its cashless technologies and means of cashless payments lag peer countries.

Developed countries long ago moved beyond a heavy reliance on cash. Europeans prefer cashless transfers and the use of cash in most European countries is limited. In Poland, for example, cards can be used for payments in all streetcars, while in Bulgaria, cards can even be used at unorganized retail markets. Ukraine has every opportunity to best those countries in terms of cashless transactions.

The NBU team decided to address the situation by implementing the Cashless Economy project, a key strategic area of development for Ukraine's financial sector.

According to the NBU, Ukrainians last year received more than half of all revenue (58%) in cashless form. However, only 18% of all expenses were cashless. This suggests most people withdrew cash from ATMs even after getting their incomes deposited onto their payment cards.

Everyday transactions like utility and government payments and pensions and scholarships are therefore priority areas for the implementation of the Cashless Economy project.

So far, no government program has aimed to implement cashless payments in Ukraine; the development of cashless payments occurred through the efforts of international payment systems and banks.

However, substantial progress has been made even without the support of government. The share of cashless card payments in Ukraine surged to 35.5% in 2016 from just 8.0% in 2011.

The expansion of convenient and secure cashless payments will provide substantial benefits to the government, banks, businesses, and individuals. It will:

- enable a step change in Ukraine's transformation from an agricultural to an innovative economy
- increase transparency in the economy and boost budget revenues by broadening the tax base and by bringing payments by individuals and businesses out of the shadows
- increase revenues for transportation companies by improving the transparency of payments for public transportation through the introduction of e-tickets
- increase the flow of foreign tourists, who are accustomed to cashless economies.

Ukraine's transition to a cashless economy can be a national project aimed at achieving European standards of living and a driver of impactful changes in the country.

First, each citizen will benefit from the convenience and security of cashless payments.

Second, it will help Ukrainian businesses mitigate risks and increase competitiveness.

Third, it will reduce public spending and cash maintenance costs.

The NBU has already completed the first step along the way.

For nearly a year, the central bank has been analyzing, developing, and implementing the Cashless Economy project.

After analyzing various factors, the NBU divided its efforts into four main focus directions:

- decreasing demand for cash
- popularizing cashless payments
- developing payment infrastructure
- changing consumer habits.

First, in 2016, the NBU held a public discussion on reducing the daily cash transaction limit to UAH 50,000. This restriction will help ensure stable growth in inflows of currency to the banking system, as well as narrow the scope for the use of cash. Those expected outcomes are supported by the analysis conducted and the example of many European countries.

In Ukraine, this will not impact the convenience of daily settlements for individuals, since over 90% of those payments do not exceed UAH 50,000.

Second, in the reporting year the NBU adopted a new strategy for currency circulation to transition from the current partially government-controlled model to a delegated model. This is a long-term project involving Ukrainian banks.

The NBU has also approved an approach to developing acceptable payment orders and has

been working on the legal framework, in particular on a single standard for receipts and digital receipts that are to be used by all service providers.

Its implementation will improve the transparency and authentication of cash flows, shrink the shadow economy, bring in additional funding to the banking system and a corresponding increase in investment, increase budget revenues through higher tax collection, reduce cash transaction volumes, and increase GDP.

In addition, the regulator is working on developing BankID (a system to remotely identify individuals and legal entities), implementing IBAN payment standards, and developing cashless transaction infrastructure for the retail sector.

The NBU supports innovative technologies and alternative means of cashless payments (mobile payments, QR code-based payments, etc.).

Third, the share of cashless payments is expected to grow to 55.0% by 2020 from 35.5% in 2016.

Fourth, the payment infrastructure needs to be developed: the number of POS terminals should grow to 11,000 per 1 million individuals.

Development of Payment Systems and Oversight

Money Transfers in 2016

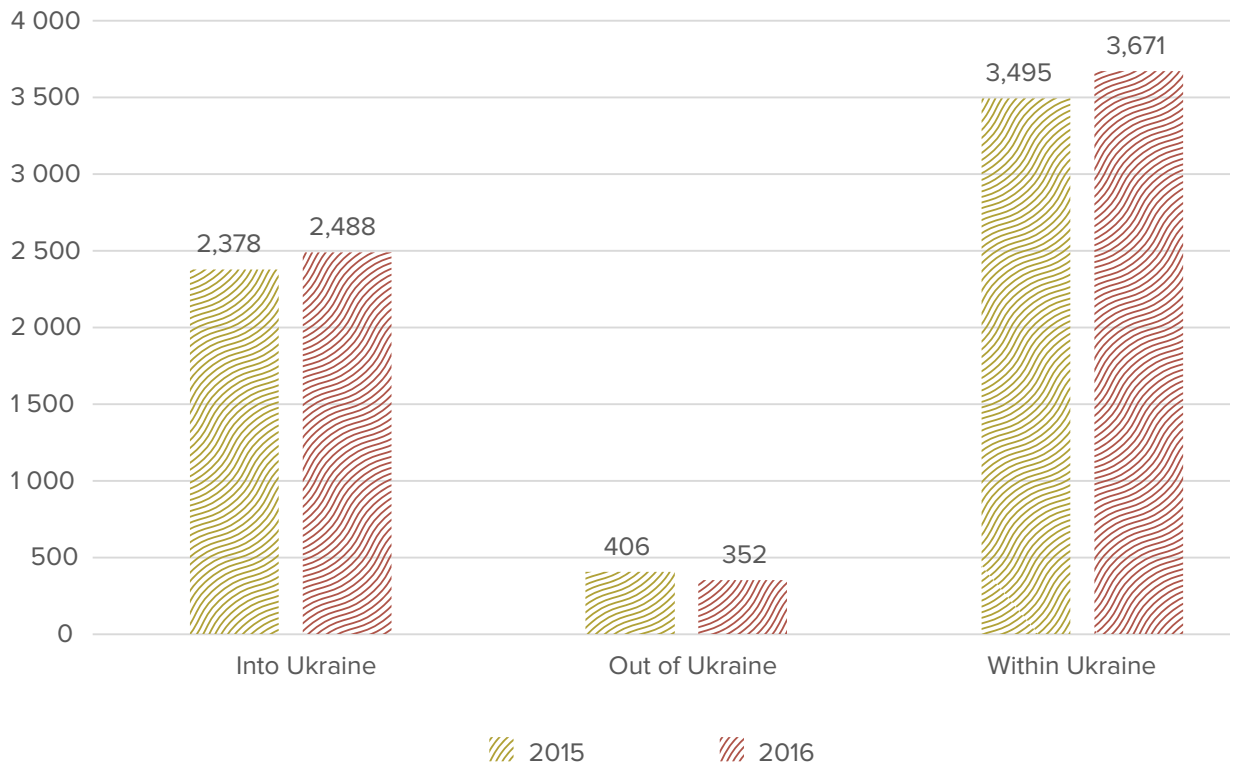
In 2016, 39 money transfer systems operated in Ukraine, 25 of which were established by residents and 14 by non-residents.

In 2016, total volumes through money transfer systems (those established by both residents and non-residents) were as follows:

- USD 2,488 million (currency equivalent) into Ukraine, up by 4.6% yoy;
- USD 352 million (currency equivalent) out of Ukraine, up by 13.3% yoy;
- USD 3,671 million (currency equivalent) within Ukraine, up by 5.0% yoy.

In 2016, Postal Transfer was the leader among resident-established systems with 163.69 million transfers at a value of USD 1,193.96 million (currency equivalent).

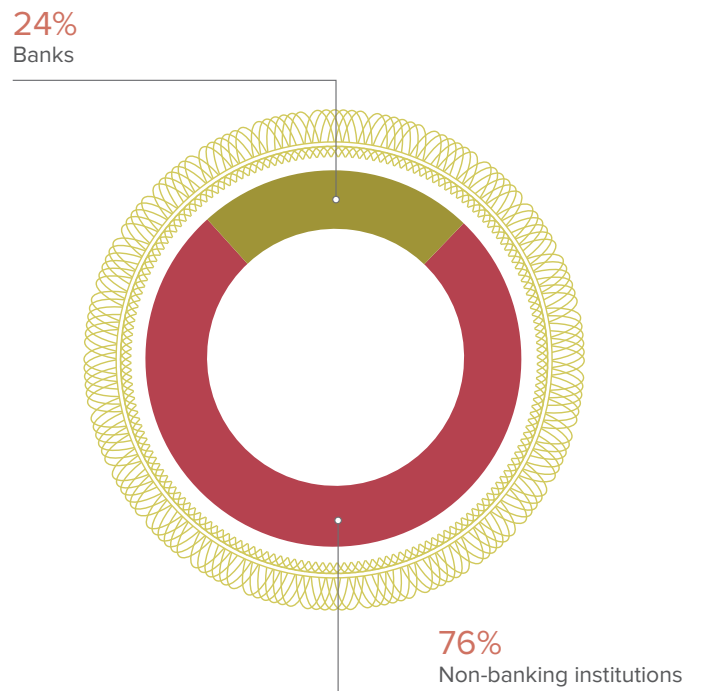
Number of transactions via money transfer systems, USD million (currency equivalent)



As of 1 January 2017, the following domestic money transfer systems provided services in Ukraine: 6 systems created by banks, 8 systems created by non-banking institutions, and 11 intrabank transfer systems.

In 2016, resident-established payment systems handled transactions worth USD 3,668.83 million within Ukraine, USD 2.37 million into Ukraine, and USD 1.38 million out of Ukraine (all figures in currency equivalent).

Payment transfers handled by systems created by banking and non-banking institutions within Ukraine in 2016, value of transfers

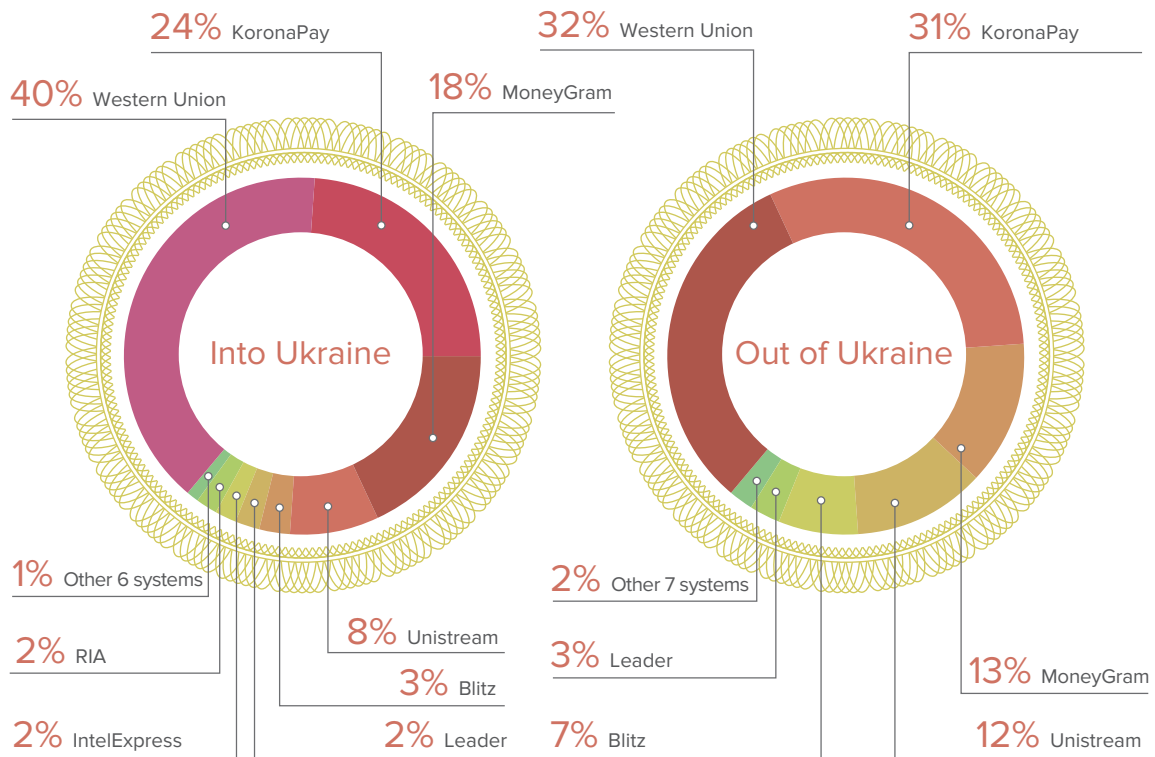


In 2016, 14 transfer systems established by non-residents operated in Ukraine, including three from the US, two from Azerbaijan, one each from Georgia, the UK, and Canada, and six from Russia²⁰. Payment systems created by non-residents handled transactions worth USD 2,485.48 million into Ukraine, UAH 350.94 million out of Ukraine, and USD 2.64 million within Ukraine (all figures in currency equivalent).

Western Union was the top non-resident payment system in 2016 with 40% of all cross-border transfers into Ukraine and 32% of all cross-border transfers out of Ukraine.

Ukraine remains a net recipient of cross-border transfers. In 2016, the amounts received in Ukraine through international money transfer systems exceeded amounts sent abroad by 7 times.

Cross-Border Transfers via Non-Resident Systems, value of transfers



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²⁰ Decree No. 467/2016 by the President of Ukraine from 17 October 2016 enacted a decision by the National Security and Defense Council of Ukraine from 16 September 2016 On the Special Economic Use of Personal and Other Restrictive Measures (Sanctions). The decision placed a one-year sanction on six payment systems created by residents of the Russian Federation barring them from operating in Ukraine

Oversight of Payment and Settlement Systems

Below is a list of the NBU's accomplishment in 2016 in the oversight of payment and settlement systems:

- established rules for the IBOX MONEY TRANSFER international payment system (a payment system of Ibox Bank PJSC), the PAYPONG domestic payment system (a payment system of Yevropeyska Platizhna Systema), the ELECTRUM domestic payment system (a payment system of ELECTRUM PAYMENT SISTEM)
- agreed on the conditions and procedures for the Sigue Money Transfer international payment system (a payment system of CEL. INT LTD in the UK)
- conducted a comprehensive evaluation of two domestic payment systems designated as socially important in terms of their operations and the types of services provided: Post Transfer, the payment system of USEP Ukrposhta, and InterPayServis, the payment system of PJSC ZAPORIZHZVIAZOKSERVIS.

The evaluation was conducted to assess compliance with Ukrainian legislation and international standards for the oversight of payment systems (Principles for Financial Market Infrastructures, CPSS-IOSCO).

Recommendations were made based on the results of the evaluation.

As part of the joint oversight of the MasterCard international payment system, the NBU and the National Bank of Belgium in May 2016 signed a memorandum of understanding to exchange confidential information for oversight of MasterCard Europe.

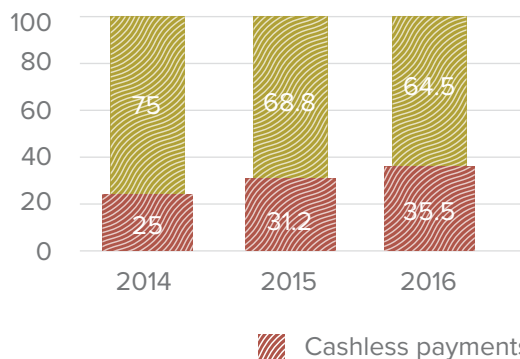
In addition, the NBU monitored objects of oversight – the payment institutions of payment systems, participants of payment systems and payment infrastructure service providers. Based on the results of the monitoring, the NBU introduced corrective measures.

Development of Cashless Payments

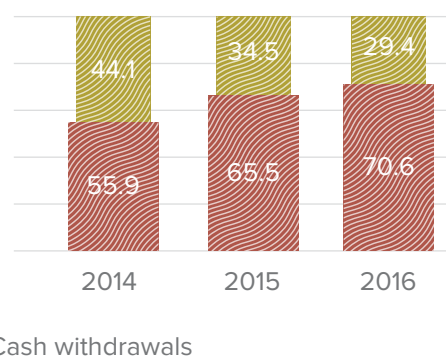
Cashless transactions using payment cards developed further throughout the reporting year. In 2016, the total number of transactions using cards issued by Ukrainian banks increased almost 28.0% to 2,513 million transactions and the volume of transactions increased 30.6% to approximately UAH 1,610 billion.

The volume of cashless transactions using payment cards grew 4.3% yoy in 2016 to UAH 571.3 billion (35.5% of all payment card transactions), and the number of the transactions grew 5.1% to 1,775 million transactions (70.6% of all payment card transactions).

Payment card transaction volumes, %



Number of payment card transactions, %



In 2016, the total number of the following types of cards grew:

- active payment cards: by 1.55 million (+5%) to 32.4 million
- contactless payment cards: by 0.54 million (+37.4%) to 1.99 million
- payment cards with digital currency functionality: by 6 times to 54,000.

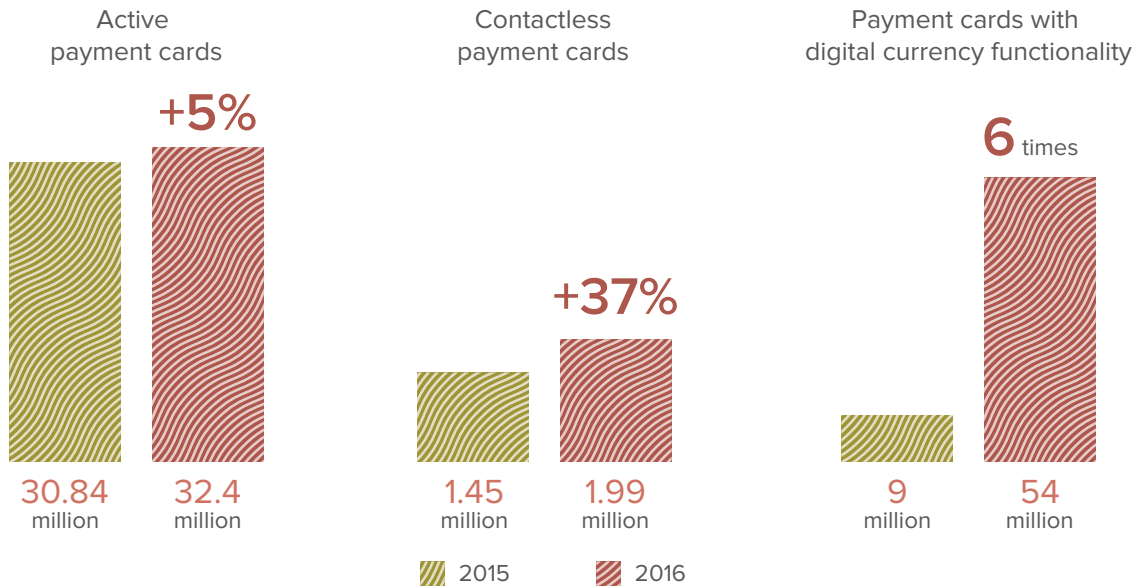
The growth in the volume and number of cashless payments using payment cards is a clear sign that payment cards are becoming

more common among individuals as a means of payment instead of cash withdrawals.

Most of the card transactions took place in Ukraine. Cashless operations prevail, indicating a positive trend towards a gradual reduction of the shadow economy and greater transparency of taxation and growth in GDP.

Holders of cards issued by Ukrainian banks conducted most of their transactions (70.2%) through the issuing bank's network. The networks of other resident banks accounted for 27.8% of transactions. In 2016, only 2% of transactions took place outside Ukraine.

Payment Card Market



The share of online payments reached 61% of all non-cash card transactions, or UAH 346 billion.

In 2016, Ukraine's payment infrastructure expanded. The number of retailers and service providers offering customers the option of cashless transactions increased 11% (by 14,674) to 145,938.

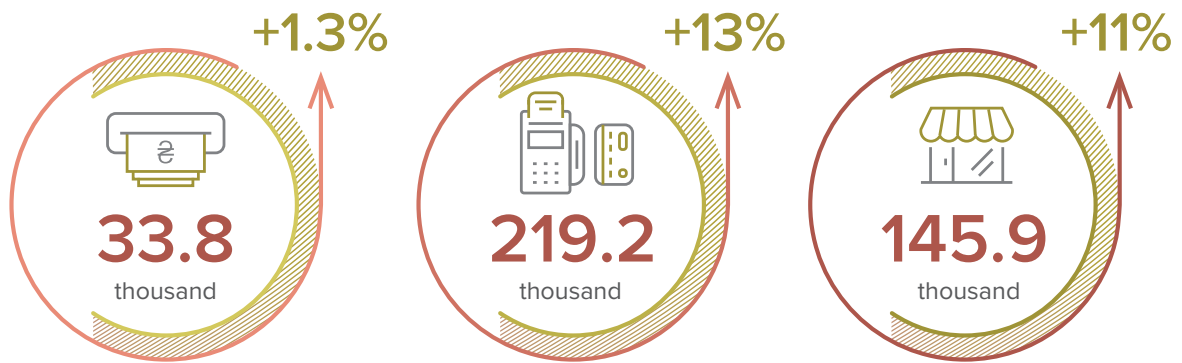
The payment tool infrastructure also grew in 2016 and as of 1 January 2017 totaled nearly 33,800 ATMs and 219,200 POS terminals

compared to 33,300 ATMs and 194,500 POS terminals as of 1 January 2016.

As of 31 December 2016, CB PrivatBank PJSC, Oschadbank PJSC, and Raiffeisen Bank Aval PJSC were the leaders by the number of cards issued and the reach of their network infrastructure services.

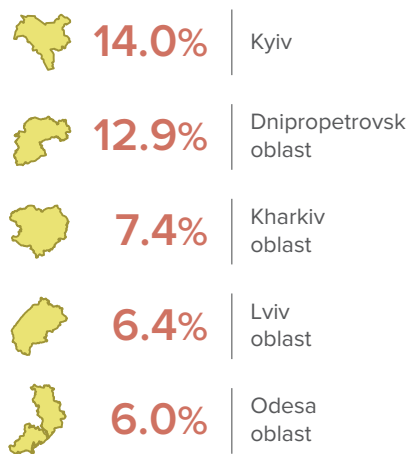
By geography, the city of Kyiv, Dnipropetrovsk oblast, and Kharkiv oblast had the most cards issued and most developed service infrastructure.

Payment infrastructure expansion in 2016

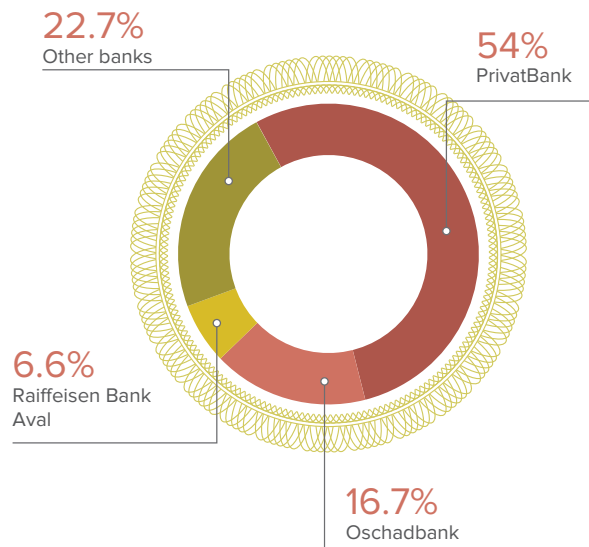


Payment card statistics in Ukraine in 2016

Active cards by geography



Active cards by banks



Improvement in the Legislation and Regulatory Acts of the National Bank of Ukraine

To improve Ukraine's legislation related to payment systems and money transfers, the NBU played a formative role in drafting bill No. 5361 to the Verkhovna Rada of Ukraine of 11 April 2016. The legislation will:

- establish a framework in Ukraine for online payment providers
- improve the regulation of payment systems and oversight procedures
- organize the activities of non-banking financial institutions in the market of payment services and give them the right to issue digital currency.

Furthermore, in 2016 in terms of the regulation of payment systems and cashless payments, the NBU:

- identified the signs of high-risk activity by non-banking financial institutions (NBFI) in transferring funds, banned high-risk activities, and gave the NBU the right to revoke NBFI licenses if an institution is deemed to have conducted those activities
- improved the procedure for the NBU to issue and revoke licenses for money transfers without having opened hryvnia accounts to prevent high-risk activities by NBFIs
- improved the procedure for commercial bank agents to receive cash payments

by formalizing the need to obtain accurate information about the service provider

- required banks to share responsibility with users over disputed card transactions as a way to boost users' trust in payment cards and to encourage banks to improve the level of service to card users
- allowed individuals to receive digital currency from non-residents as per the established procedure
- allowed non-resident affiliates of international organizations to act as commercial agents of an issuing bank in the distribution of electronic currency, which will help expand the services provided to users of money
- eliminated the requirement for legal entities to submit paper applications when opening an account and allowed online applications
- established the procedure for a liquidator to open a current account in the name of a bankrupt individual
- allowed individuals to use the BankID single electronic system for remote identification when obtaining administrative services
- reduced the number of documents required from political parties to open an account. These are now limited to a copy of the party's registration and the established procedure for submitting reports on account openings/closings of the political parties/ local party organizations in Ukrainian banks to the Accounting Chamber of Ukraine and the National Agency on Corruption Prevention.

System of Electronic Payments at the NBU

The NBU continues to ensure reliable interbank transfers in the national currency and has created a system that meets the needs of its members.

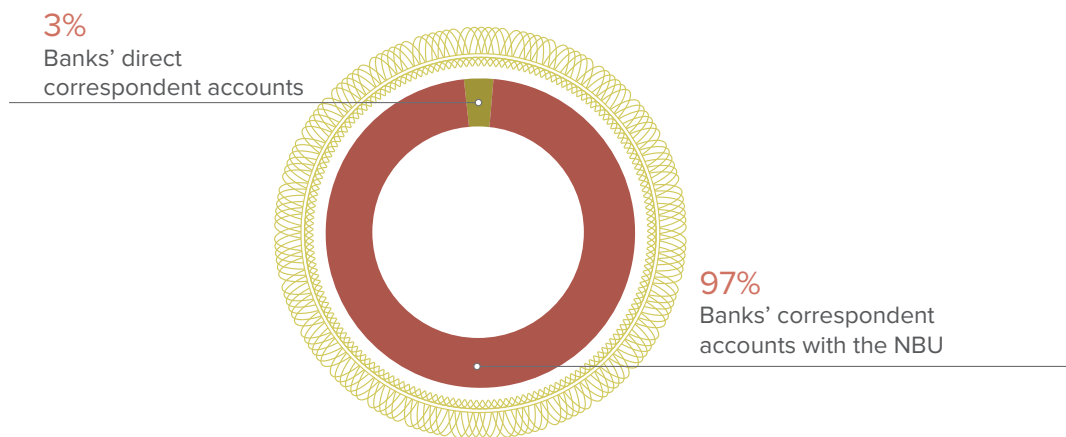
During the reporting year, 97% of interbank payments in Ukraine denominated in hryvnia were conducted through the state banking payment system, the National Bank of Ukraine's System of Electronic Payments (SEP).

The SEP is the only payment system recognized as systemically important in Ukraine.

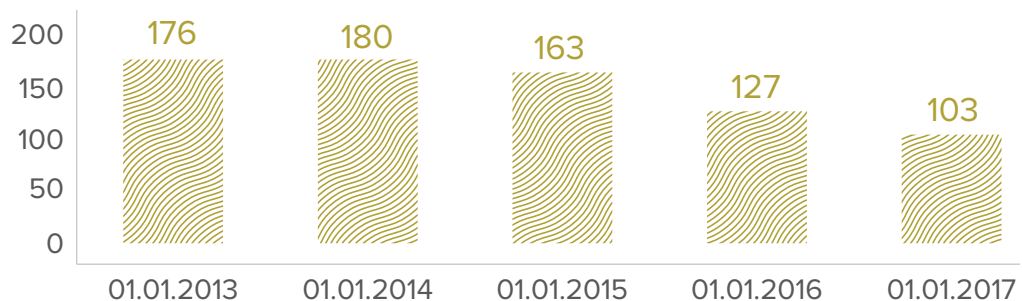
As of 1 January 2017, 216 entities were participants in the SEP, including: The NBU, 103 Ukrainian banks, 85 branches of Ukrainian banks operating via the SEP through banks' correspondent accounts, and 27 agencies of the State Treasury Service of Ukraine (SCSU) working via the SEP through the Single Treasury Account.

The number of SEP participants decreased 19% yoy in 2016 as insolvent banks were removed from the market and several banks were liquidated by decision of their owners.

UAH-denominated interbank transfers made through banks' direct correspondent accounts and via the SEP



Banks participating in the SEP



Last year, the SEP processed 313 million initial payments and a turnover of UAH 19,521 billion. The number of payments made through the system is steadily growing: the number of payments rose 10% yoy in 2016.

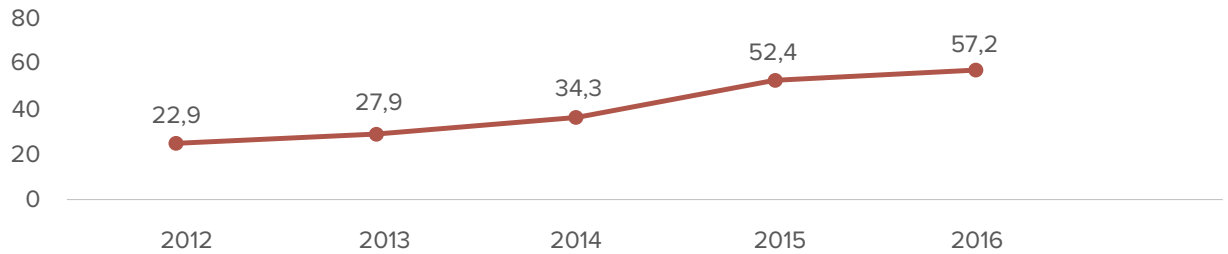
Ukrainian banks and their branches accounted for 93% or 291 million of all the initial payments processed through the SEP.

The average daily balance of accounts in the SEP totaled USD 57.2 billion in 2016, 9% more than in 2015.

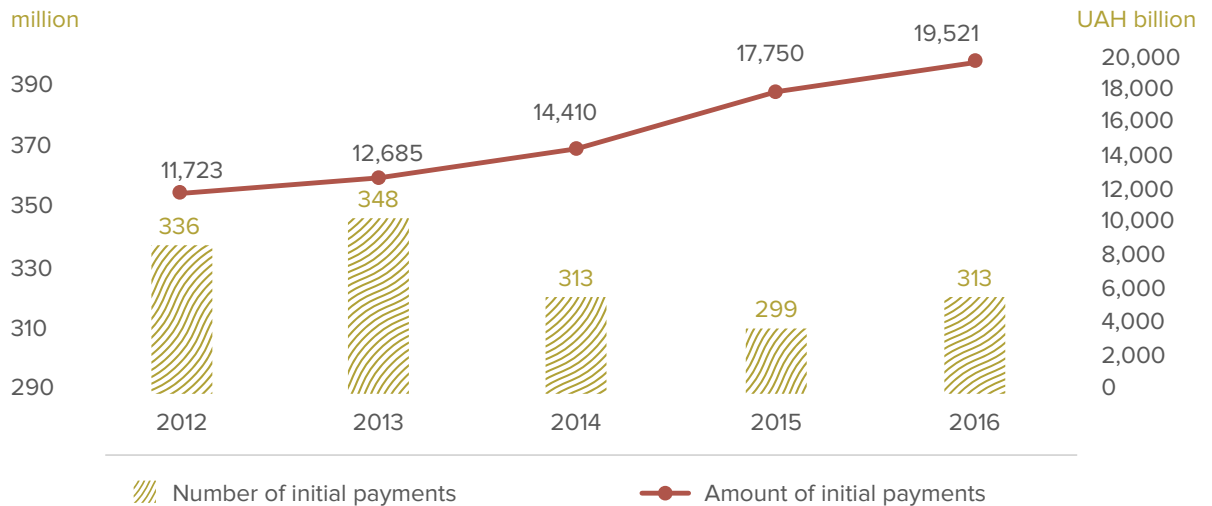
The average daily turnover ratio of participants' accounts was 1.36, including 1.33 for banks' correspondent accounts.

In 2016, the SEP processed on average 1.2 million initial payments totaling UAH 78 billion per day.

The average daily balance on the accounts of SEP Participants, UAH billion



Volume of SEP payments



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PROSTIR Ukrainian Payment Area

The development and expansion of the PROSTIR national payment system is an important element of the Cashless Economy project. In 2016, the NBU worked actively to develop cashless payments and bolster the role of national payment systems to help ensure Ukraine’s financial independence.

The NBU also continued to develop NPS PROSTIR’s central switch and clearing center (hereinafter – the Central Clearinghouse), which processes domestic interbank transactions and clears and settles transactions using NPS PROSTIR payment cards issued by authorized banks.

NPS PROSTIR: Operations, users, and infrastructure

As of the start of 2017, 48 of Ukraine’s 93 banks (52%) were members of NPS PROSTIR.

In 2016, seven banks signed on to NPS PROSTIR. In addition, following the re-branding and registration of the new “Ukrainian Payment Area” (“PROSTIR”) trademark, new contracts were signed with all member banks. In 2016, the seven new members were connected to the Central Clearinghouse.

During the reporting year, seven banks left the PROSTIR system as they ceased banking

operations and one bank left on its own initiative.

In 2016, two independent processing centers became members of NPS PROSTIR: TAS Link JSC and Ukrainian Financial Network JSC.

In addition, a representative office in Ukraine of Austria Card Plastikkarten und Ausweissysteme GmbH obtained a permit to produce and personalize PROSTIR cards with a magnetic strip, and PORTMONE LLC became a service provider for NPS PROSTIR’s payment infrastructure.

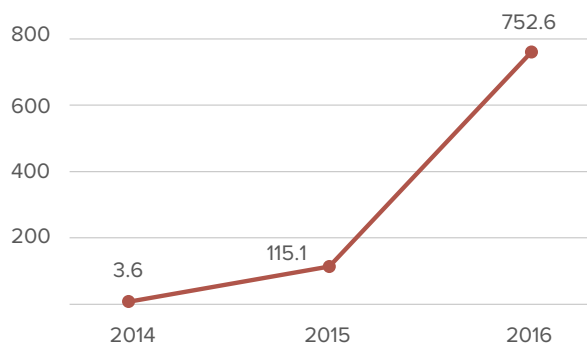
At the end of 2016, 799,000 PROSTIR branded payment cards were outstanding and the number of active cards increased 29% yoy to 289,000 cards.

PROSTIR payment cards handled 5.3 million transactions for a total UAH 6.7 billion. The Central Clearinghouse processed over 753,000 interbank transactions worth approximately UAH 685 million.

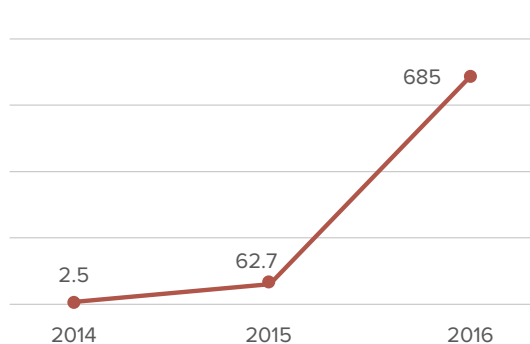
In 2016, the total volume of interbank transactions processed by the Central Clearinghouse increased by almost 11 times and the number of transactions increased by 6.5 times.

As of 31 December 2016, PROSTIR’s payment infrastructure included 14,400 ATMs or 71% of Ukraine’s entire ATM network and 169,200 POS terminals or 77% of all of Ukraine’s POS terminals.

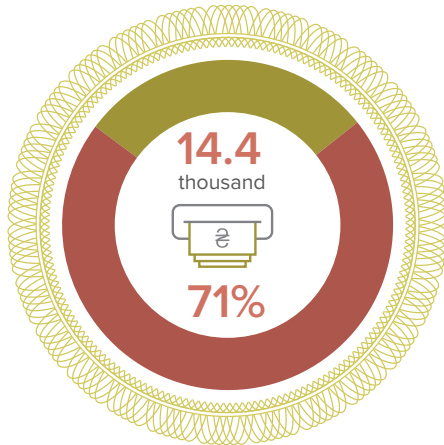
Number of interbank transactions, thousand



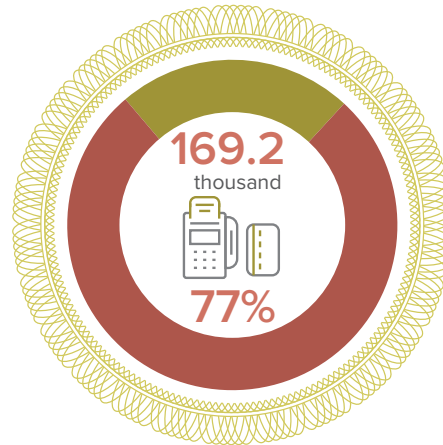
Volume of interbank transactions, UAH million



2016 PROSTIR cards infrastructure



ATMs



POS terminals

Key achievements for NPS PROSTIR in 2016:

- registered the new trademark “Ukrainian Payment Area” (“PROSTIR”) and changed its name and logo as part of the rebranding of the National System of Mass Electronic Payments (NSMEP)
- created a website NPS “PROSTIR” (www.prostir.gov.ua/prostir/en) to provide information on the national payment system, its performance, an interactive map of ATMs, and more
- introduced a new approach to manage the risk of a member’s failure under interbank card payments for PROSTIR cards, which significantly reduces risks and helps prevent attacks
- improved the dispute resolution process by extending deadlines and introducing new transaction types, which will allow most disputes to be resolved without the involvement of the Arbitration Commission
- amended the rate policy to reduce the number of fees and introduce a single rate for processing interbank card payments
- launched electronic pension certificates (EPC) for internally displaced persons based on PROSTIR cards with NFC features
- oschadbank JSC intrabank transfers
- moved to divest non-core functions from the NBU (transferred the NBU’s salary cards to a commercial bank, signed a memorandum with the State Fiscal Service to transfer the collection and storage of data of payment transaction registrars).

Cash Circulation

In 2016, the Ukrainian economy was sufficiently supplied with banknotes and coins of all denominations, and banks received cash supplies in an effective and timely manner. Another new generation banknote, the UAH 500 note, was added to the family of Ukrainian banknotes. A commemorative UAH 20 banknote and 47 commemorative coins were also entered into circulation. The NBU also began implementing the Policy on Cash Circulation in Ukraine.

As of the start of 2017, banknotes and coins in circulation totaled UAH 341.1 billion. This was 10.6% or UAH 32.8 billion more than at the start of 2016 (UAH 308.3 billion).

The total for 2016 included 2.98 billion notes worth UAH 339.0 billion, 12.7 billion circulation

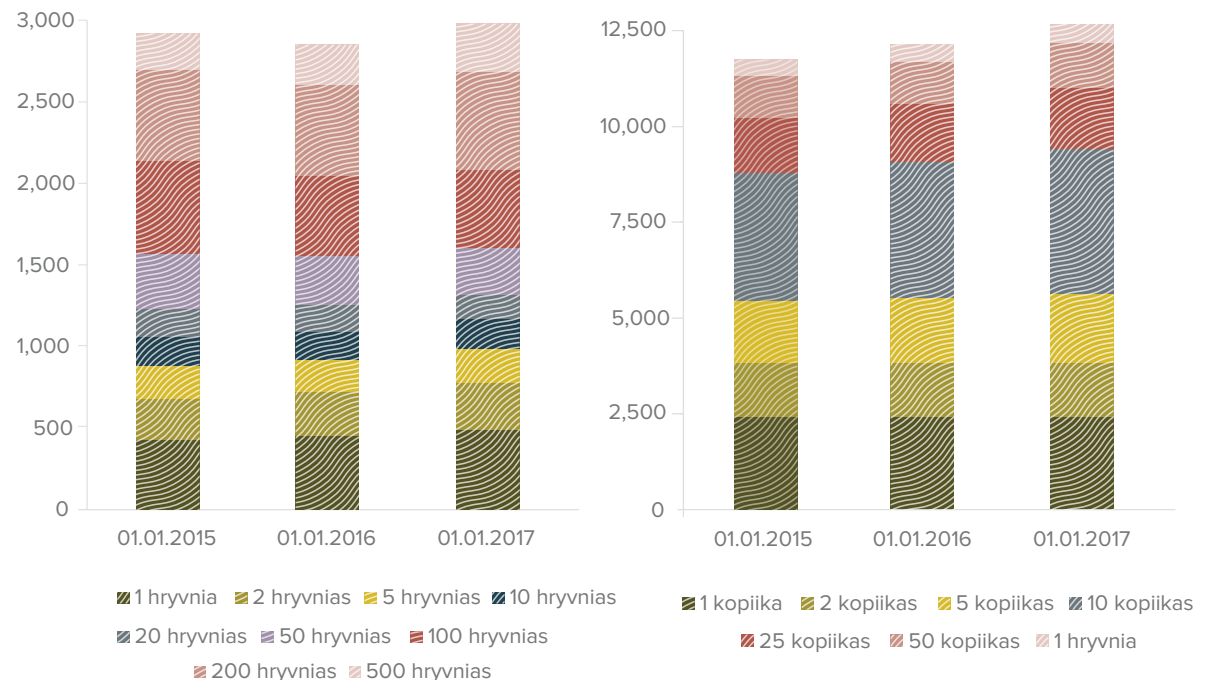
coins worth UAH 2.0 billion, and 11.4 million commemorative and investment coins worth UAH 58.4 million. In 2016, the number of banknotes in circulation increased by 131.6 million (4.6%) and coins by 514.5 million (4.2%).

As of 1 January 2017, the total number of banknotes and coins per capita stood at 70 and 285 pieces respectively.

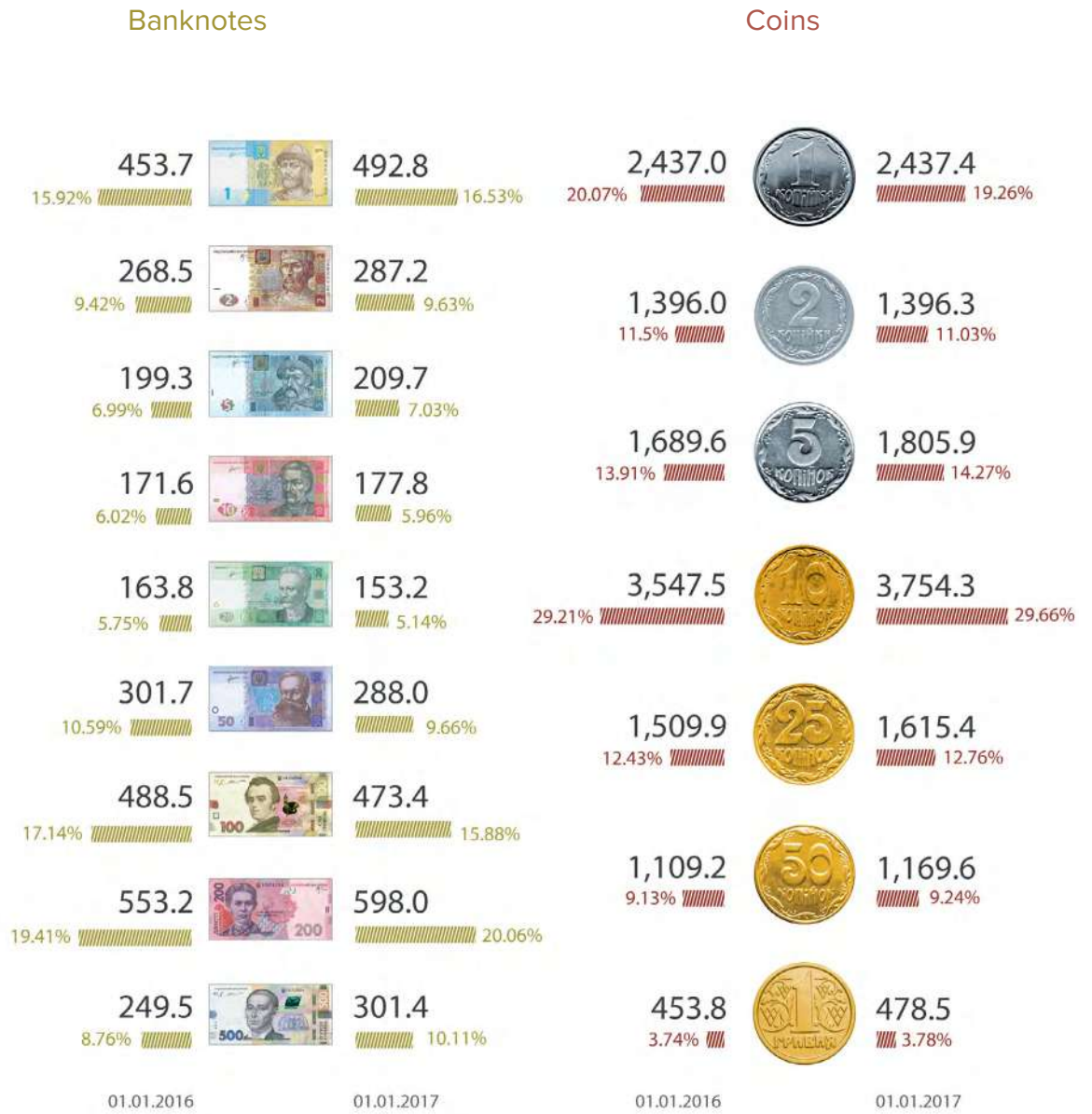
In 2016, UAH 151.2 billion in cash was distributed to banks. This included UAH 66.7 billion for pension payments disbursed through post offices at reduced rates, or 44% of the total amount of distributed cash.

To ensure prompt, reliable, and efficient management of cash circulation, a system of automated cash circulation was introduced and cash handling applications were centralized with a single database, applications server, and a set of standard customer workstations.

Number of banknotes and coins in circulation (as of the beginning of the year), million pieces



Cash in circulation, million pieces



Hryvnia Banknote Series



Banknotes introduced into circulation in 2016 have new security features.

To improve the organization of cash circulation, the NBU worked to optimize the denomination of banknotes and coins.

On 11 April 2016, the NBU released into circulation new UAH 500 banknote. The notes were designed in 2015 and carry advanced security features. The new generation note is part of the NBU's continued efforts to update older denominations.



The new banknotes have new security features that help prevent counterfeiting and make it easy to determine the authenticity of the banknotes. These features include:

- The window thread is a colored polymer thread partially embedded in the paper (green on the UAH 20 banknotes and dark gray on the UAH 500 banknotes) with a kinematic effect. The thread is lined with the banknote's denomination and the hryvnia's symbol. When tilted, the background image moves in the opposite direction.



- The optically variable SPARK element with a kinematic effect. When tilted, some areas of the image gradually change color (from magenta to golden-green on the UAH 20 banknotes and from green to blue on the UAH 500 banknotes).



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Cash Outside Banks and at Bank Cash Desks

In 2016, cash supplied to and withdrawn from banks in Ukraine increased. Cash supplies to banks in Ukraine increased 9.1% yoy or by UAH 127.5 billion to UAH 1,530.6 billion. For comparison, in 2015 the same measure increased 0.6% yoy or by UAH 8.3 billion to UAH 1,403.3 billion.

Withdrawals from bank cash desks increased 11.3% yoy or by UAH 159.3 billion to UAH 1,562.5 billion. For comparison, in 2015 the same measure decreased 2.6% yoy or by UAH 37.0 billion to UAH 1,403.3 billion.

As of 1 January 2017, cash outside banks (M0 monetary aggregate) increased 11.2% yoy or by UAH 31.7 billion to UAH 314.4 billion. In contrast, in 2015 M0 decreased 0.1% yoy or by UAH 0.3 billion to UAH 282.7 billion. Inflation and depreciation processes, higher utility tariffs, payments by the Deposit Guarantee Fund, the introduction of temporary bank administration and the liquidation of banks, the nationalization of CB PrivatBank PJSC, and other factors contributed to the growth in M0.

Cash outside banks increased their share of the total money supply 0.1 pp to 28.5% in 2016. As of the start of the year, banks' cash balances grew 4.3% yoy or by UAH 1.1 billion to UAH 26.7 billion.

To monitor the compliance of banks and non-bank financial institutions with the NBU's regulatory requirements for technical protection and security, 287 inspections of security measures for the protection of premises were conducted at branches of 22 NBFIs.

Cash Handling and the Removal of Unfit Banknotes from Circulation

In 2016, the NBU received almost 2 billion banknotes for processing, including 1.7 billion notes from banks, 0.7 billion notes fewer than

in 2015 (2.6 billion notes). The reduction came mainly on lower inflows from banks and the closure of cash servicing divisions in Zhytomyr and Ternopil oblasts on 1 December 2016.

During the reporting year, the NBU processed 1.9 billion banknotes (96% of received banknotes), 0.7 billion notes fewer than in 2015 (2.6 billion), including 1.7 billion notes processed through automated banknote processing systems.

Over the year, the NBU's cash divisions received 1,960,100 bundles of notes for processing, representing 14.1% of all cash received by the cash desks of banks (13,903,300 bundles).

As a result, through its banknote processing operations, the NBU accounted for 14.1% of cash received by banks. In all, 472.7 million unfit banknotes were destroyed in automated systems.

The NBU received 805,300 bundles of unsorted banknotes in 2016, 20% less than in 2015 (1,012,700 bundles), and accounting for nearly 38.0% of all cash (1,960,070 bundles) submitted for processing to the NBU's cash divisions in 2016 (45% of cash received in 2015). In 2016, 821.2 million worn-out banknotes were removed from circulation, totaling UAH 41.6 billion. The number of banknotes removed decreased 11.5% yoy (928.3 million notes worth UAH 41.5 billion in 2015).

To improve the quality of cash in circulation, the NBU amended²¹ its instructions *On Conducting Cash Transactions by Banks in Ukraine*, approved by Resolution No. 174 of the NBU Board dated 1 June 2011. The amended instructions outline the obligations of the bank (branch or office) to supply its subsidiaries, branches, or other banks (subsidiaries or branches) with notes to be reissued into circulation only after being processed using automated banknote processing equipment. The new requirement came into force on 1 January 2017.

Removal of Counterfeit Notes from Circulation

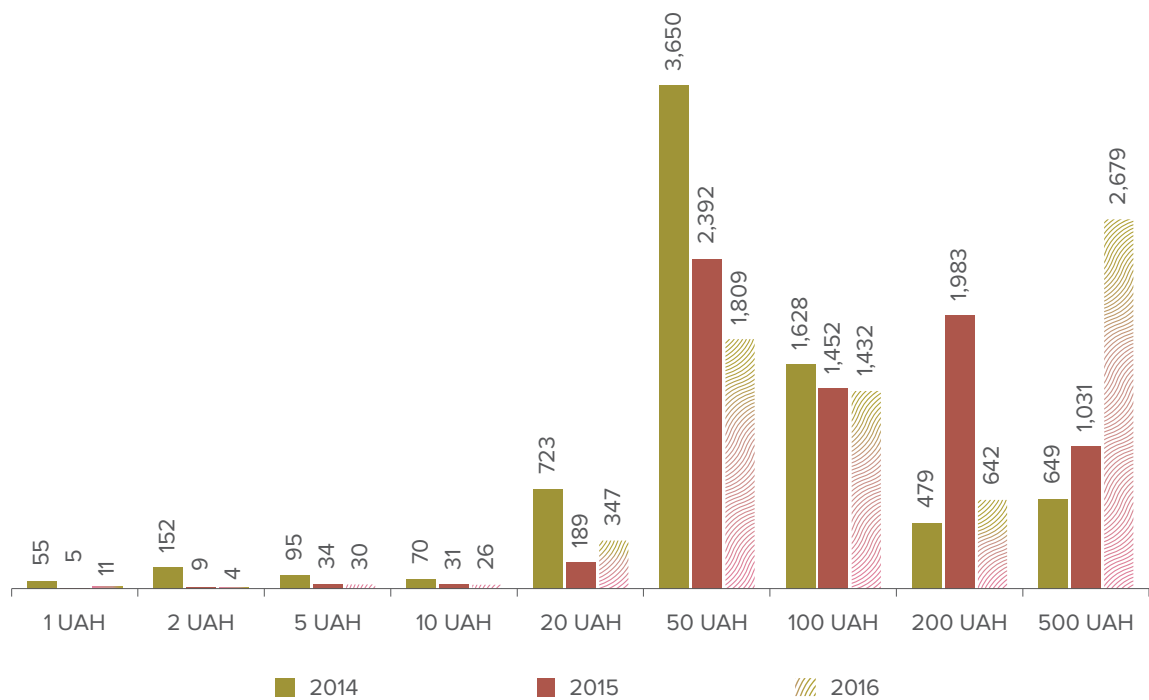
The tests conducted by the NBU in 2016 found approximately 7,000 hryvnia banknotes to be counterfeits, which were removed from circulation. The total number of counterfeit notes remained steady yoy. The counterfeit notes removed from circulation were valued at UAH 1.7 million, 40% more than in 2015 (owing to an increase in the number of forgeries of the UAH 500 note).

The banknotes most frequently found to be counterfeit were the UAH 500 note (2,679 notes), the UAH 50 note (1,809), the UAH 100 note (1,432), and the UAH 200 note (642).

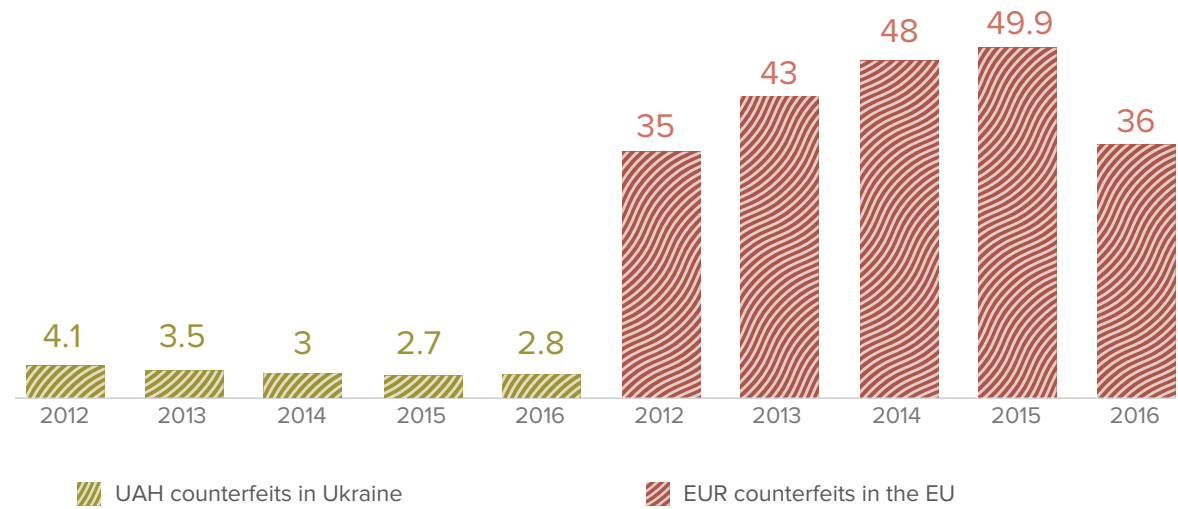
In addition, in the reporting year banknotes of the following foreign currencies were identified as counterfeit and confiscated:

- 728 US dollar notes (2015: 456), with the USD 100 prevailing (93% of confiscated counterfeit USD notes)
- 314 euro notes (2015: 239), with the EUR 200 and EUR 100 notes found most frequently (respectively, 42% and 26% of all confiscated counterfeit euro notes)
- 382 Russian ruble notes (2015: 80), with the RUB 5000 found most frequently (97% of all confiscated counterfeit Russian rubles)
- 72 Japanese yen notes (none in 2015), all JPY 10,000 banknotes.

Number of confiscated counterfeit banknotes, by UAH denomination, number of notes



Number of counterfeit banknotes per 1 million authentic notes



Releases of Commemorative and Investment Coins in 2016

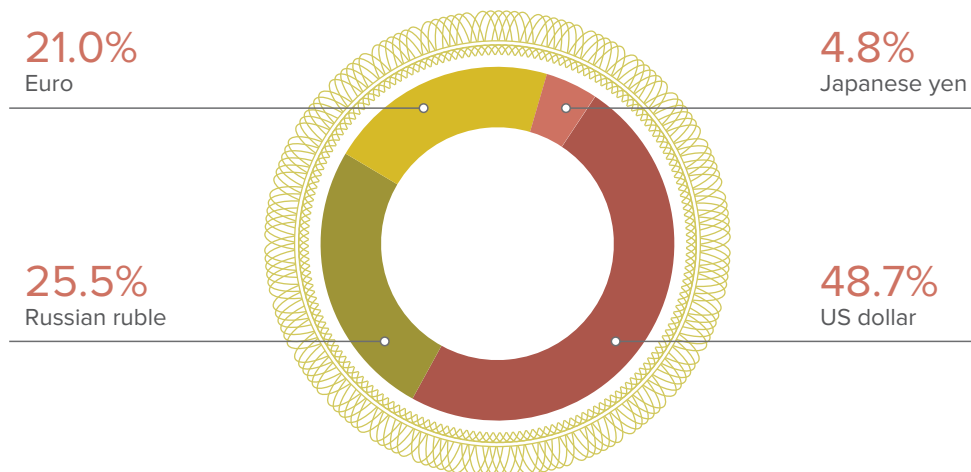
In 2016, the NBU released 47 commemorative coins (37 titles).

The releases have a total mintage of 1,155,400 coins.

The NBU issued commemorative coins to mark following events:

- 25 years of Ukraine's independence
- the 100th anniversary of the first performance of composer Mykola Leontovych's Shchedryk carol

Counterfeit foreign currency banknotes in 2016



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- 150 years of the National Parliamentary Library of Ukraine
- the 150th anniversary of the birth of Mykhailo Hrushevsky
- the 75th anniversary of the birth of Ivan Mykolaichuk and Bohdan Stupka.

The NBU also launched a new series of coins titled *Fauna in Ukrainian Cultural Monuments*.

In addition, medals commemorating the 30th anniversary of the Chernobyl Catastrophe were issued, while the 20th anniversary of currency reform in Ukraine was celebrated through the release of a commemorative UAH 1 circulating coin and a commemorative set of banknotes.

All coins and souvenirs were manufactured using modern pad printing, enamel coating, gilding, and holographic image techniques.

Releases of commemorative and investment coins in 2016



In 2016, the NBU held its annual contest to award the Best Coin of 2015. Winners were awarded in three categories:

- The *Volodymyr the Great, Grand Duke of Kyiv* commemorative coin won in the *Best*

Coin of 2015 and Successful Artistic Solution categories

- The *Bohdan Khmelnytskyi* series of commemorative coins were named *the Unique Concept*.

Best Coin of 2015



Volodymyr the Great, Grand Duke of Kyiv



Bohdan Khmelnytskyi



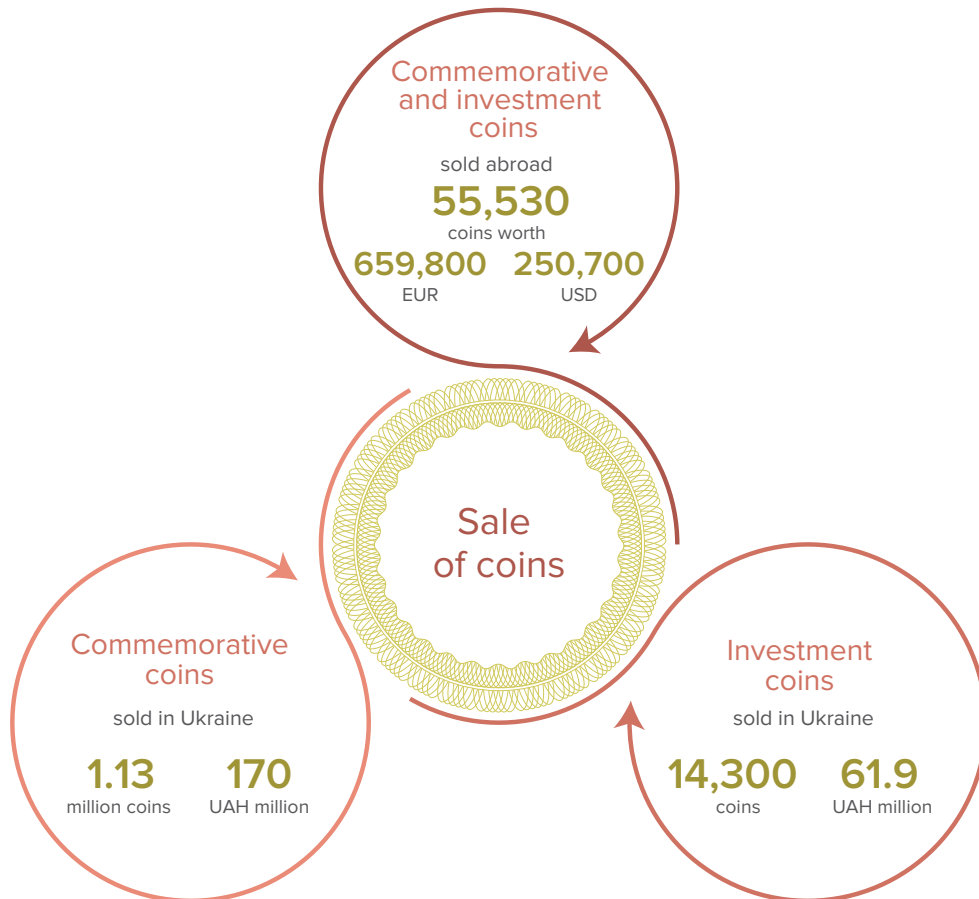
Sale of Commemorative and Investment Coins

In 2016, the NBU sold:

- in Ukraine: 1.13 million commemorative coins worth UAH 170 million and 14,300 investment coins at a value of UAH 61.9 million;
- abroad: 55,530 commemorative and investment coins worth EUR 659,800 and USD 250,700.

In 2016, the NBU resumed holding numismatic auctions and decided to sell the entire issue of gold *25 Years of Ukraine's Independence* commemorative coins at public auction, conducted by the Universal Commodity Exchange House of Contracts UICE. Throughout the year, 196 gold *25 Years of Ukraine's Independence* commemorative coins were sold through the auction house (49% of their total circulation) worth UAH 27.78 million.

Sale of commemorative and investment coins in 2016



In September 2016, the NBU launched an online site for pre-ordering new issue commemorative coins. The site generated some 20,000 in sales of commemorative coins. The *Ukraine Starts With You* commemorative coin was the first coin available for online pre-order.

As per the 2017 schedule for commemorative coin issues, the following events will be commemorated:

- the 200th anniversary of outstanding Ukrainian historical figures Mykola Kostomarov, Ivan Aivazovsky, and Mykhailo Petrenko
- the 150th anniversary of the Taras Shevchenko National Opera House of Ukraine
- the 100th anniversary of the Ukrainian Revolution of 1917-1921
- the 100th anniversary of the birth of Tatiana Yablonska
- the 100th anniversary of the National Academy of Visual Arts and Architecture
- completion of the *Oblasts of Ukraine* series
- the Eurovision Song Contest 2017.



Commemorative Coin 25 Years of Ukraine's Independence

sold at public auctions at the Universal Commodity Exchange *House of Contracts UICE*

196 worth **27.8**
coins UAH million



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YEARS OF CURRENCY REFORM

Policy on Cash Circulation in Ukraine

The NBU Board approved the new Policy on Cash Circulation in Ukraine by adopting Resolution No. 207-рш dated 11 August 2016.

The Policy outlines a shift from the in-house centralized model of cash circulation currently in place in Ukraine to an outsourcing model.

Under the outsourcing model, the NBU will contract out part of its regional cash distribution functions to other market participants, including banks and Cash-in-Transit (CIT) companies.

The outsourcing model is appropriate for Ukraine in the context of pan-European trends, the change processes taking place at the NBU, and the implementation of the *Cashless Economy* project.

Outsourcing will help to:

- lower cash circulation costs
- foster competition in the market of cash collection services
- reduce the share of cash payments in favor of cashless payments.

The United Kingdom, Brazil, the Netherlands, Finland, and Sweden are countries that have implemented a similar outsourcing model.

Designated banks will perform cash handling functions throughout the regions of Ukraine. Going forward, third parties (CIT companies) will be involved in the process under the oversight and control of the NBU and in compliance with rules set by the regulator. In 2016, the NBU delegated cash transportation functions to certain third parties. To that end, the regulator issued a license to provide cash collection services to banks to CIT Security LLC and contemplated the document submitted by three legal entities that applied for the cash collection licenses.

The new policy also foresees the NBU depositing its stocks of banknotes and coins in the vaults of designated banks that meet the requirements set out in the *Selection Procedure and Eligibility Criteria to be Met by Banks to Qualify as Custodians of NBU Cash Reserves*²².

Pilot projects for the new cash circulation model have been launched in Ternopil and Zhytomyr oblasts, and a detailed action plan will be drafted following the tabulation of the pilot projects' results.

"It is easy to lose one's way alone,
but it's hard to veer off course in a group"

Lesia Ukrainka

05 Increasing Efficiency

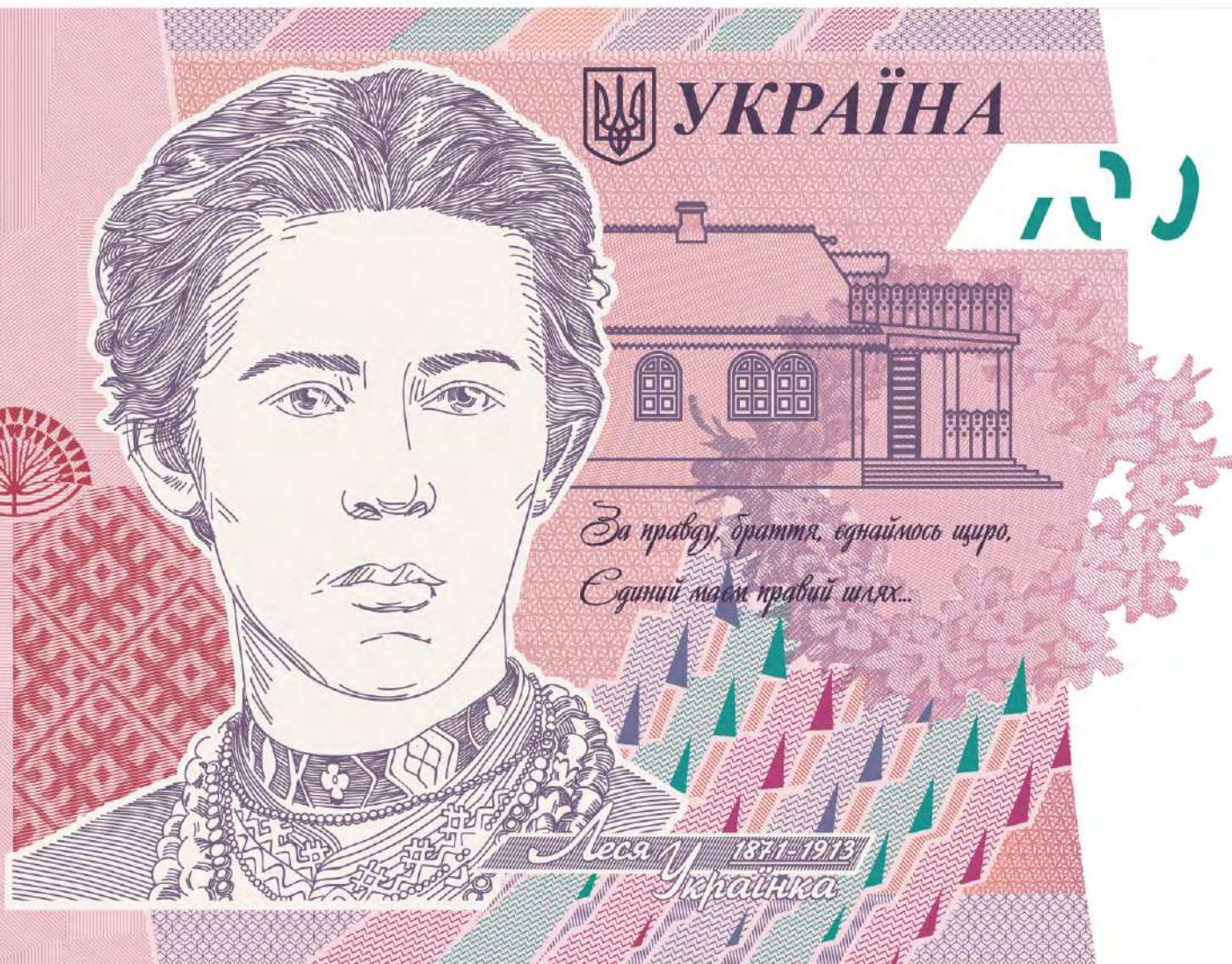
05 INCREASING EFFICIENCY

Transformation of the National Bank of Ukraine

Communications Policy: Transparency
and Partnership

Human Resources Management
and the Development of Human Capital

Internal Control System
Financial Controls
Risk Management
Internal Audit



*We encourage dialogue and partnership, we have a common vision,
and we work together to implement the NBU's mission*
PARTNERSHIP – a key value of the NBU

20

YEARS OF CURRENCY REFORM



Deputy Governor of the National Bank of Ukraine

Roman Borysenko



“The NBU has become a model of reform for other government bodies, showing that fundamental changes are possible”

Over the last two years, the NBU has managed to launch one of the most important packages of reforms for the economy. The reforms address a complicated sector and overhaul the NBU’s role as a regulator and an institution. The NBU has been rapidly overcoming a difficult path of change from a highly bureaucratic post-soviet regulator into a modern, open, and independent central bank. The modern version of the central banks desires the public’s confidence and wants to integrate into the European community of central banks. The acknowledgment of the NBU’s success by international partners, donors, and the business community is a shared victory that belongs to the entire team at the central bank.

The year 2016 was marked by barely noticeable but very significant and fundamental changes within the NBU. We worked to improve the quality of financial reporting, streamline the flow of electronic documents, optimize and automate processes, establish internal channels of communication between operating units, and upgrade and develop our own brand. Efforts to centralize the NBU’s functions have continued.

The NBU is continuing to set new standards and establish new trends in public sector reform. Any changes have to begin with each of us. With this in mind, employees from various operating units have been engaged in the process of internal change, and each employee is making a significant contribution to the common goal of building a new central bank. This kind of approach requires effective horizontal cooperation between representatives of various management layers, ensuring as much transparency to internal processes as possible, while boosting employee engagement.

The NBU will continue acting as the engine of financial sector reform. The implementation of the many tasks that lie ahead is outlined in the Comprehensive Program of Ukrainian Financial Sector Development Until 2020.

20

YEARS OF CURRENCY REFORM

Transformation of the National Bank of Ukraine

After the reforms of previous years, the NBU in 2016 focused on optimizing and reengineering its processes. The central bank also concentrated on transitioning non-core functions and assets away from the regulator competence.

NBU Process Management

The NBU is comprised of a large number of interrelated processes. Close coordination across all levels, the delegation of authority, and the implementation of horizontal communications are keys to the efficient management of internal processes.

The process design work that took place throughout 2016 gave employees an understanding of the processes and information about the level of involvement and responsibility of various NBU units in the processes.

The following breakthroughs took place in 2016 in the NBU's Process Management:

- introduced a culture of process management, which is constantly being fine-tuned
- developed and adopted global management practices and process modeling
- identified processes defined as critical to minimizing risk
- determined agents of change within operating units (employees responsible for or involved in a business process)
- developed and approved the NBU's process flow structure, which has three levels and process owners
- created centralized data bases containing job descriptions and regulations on the central bank's operating units
- inventoried NBU regulatory documents, established an e-library of documents
- modelled a portfolio of NBU processes (123 processes) and created a depository of processes
- optimized key processes.

2016 in Figures from a Process Management Perspective



27

Number of 1st level basic processes (areas)



32

Owners of 2nd level processes



146

2nd level processes



1,770

Documents that govern processes



52

Designated employees of operating units



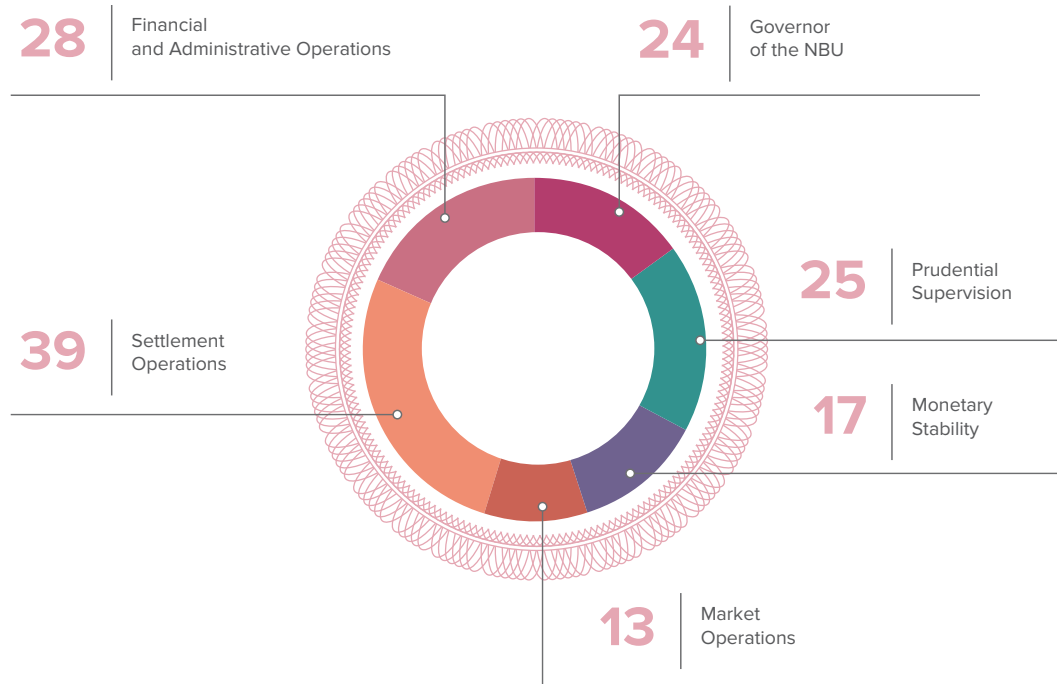
123

Processes modelled and agreed with process owners

The year 2016 marked a solid start to the establishment of a fully developed process-managed organization. All relevant

processes have been defined and modelled, subject to further optimization and automation.

Structure of 2nd level processes based on functional areas



Project Management at the NBU

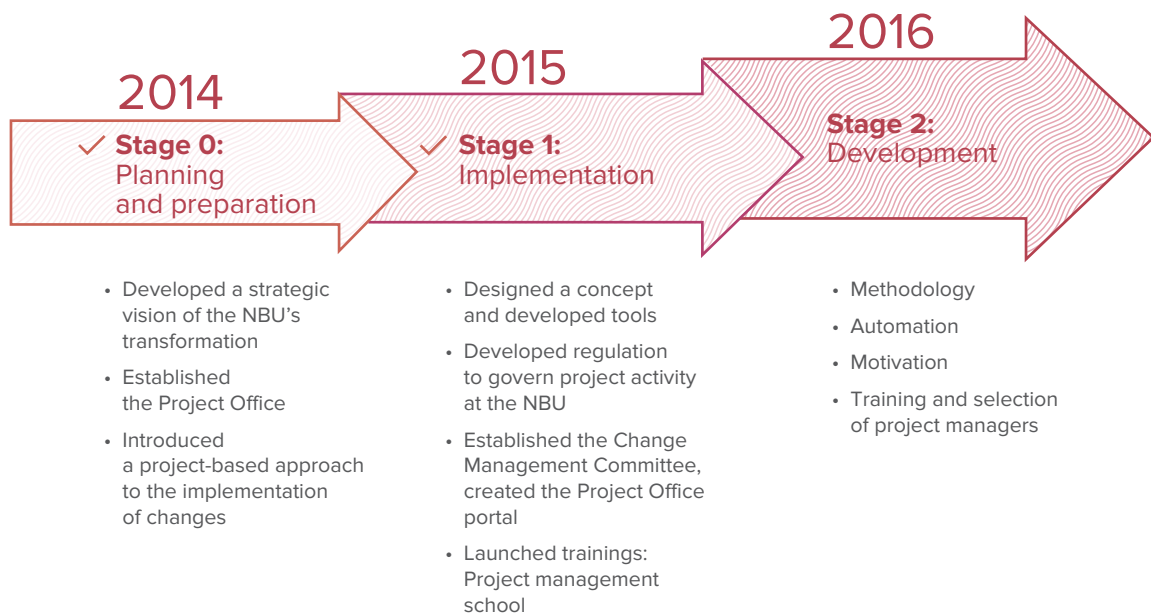
The NBU was among the first government institutions that adopted an integrated project-based approach to operations.

In 2015, the NBU Project Office was set up on the basis of the office for strategy and reform. The Project Office will manage large-scale changes that take place as part of the internal

organizational transformation at the regulator and within financial sector reform overall. At the same time, refining the operations of the Project Office is a complex but necessary step towards supporting the implementation of the NBU's long-term strategy.

The work done on project management in 2014-2015 laid the foundation for the developments and improvements that took place in 2016.

Stages of implementation of project management at the NBU



By early 2016, the project portfolio included over 40 projects. Without specialized tools and advanced knowledge, the management of this complex of a portfolio of projects would be complicated. The Project Office therefore worked diligently to structure, automate, and improve available project management tools.

Key Milestones in 2016:

- created the Project Office, a single analytical center tasked with analyzing all initiatives at the NBU for their feasibility and viability
- launched the Project Office portal, with an updated register of all projects at the NBU, open to any central bank employee. The portal has sub-pages dedicated to each

project, housing all of a project's supporting documents

- developed and standardized the reporting format for project managers, comprising information about planned and implemented measures, planning and use of project budgets, updated deadlines and resources, and risks to be minimized
- training: in 2016, project management activity focused mainly on promoting the project management culture and supporting and training NBU employees. Last year, the Project Managers Club held two meetings, which were also attended by speakers from the business and public sectors in order to exchange knowledge and best practices in the process of reforms.

Centralization of NBU functions

The centralization of the NBU's non-core functions and reform of regional offices was completed in 2016:

- processes were established. The NBU streamlined its work with regional offices following the centralization of many supporting functions
- all regional NBU offices were removed from the Single State Registry
- established a team of central bank representatives in the regions.

Currently, the regional offices only perform cash flow maintenance functions.

The NBU's Approach Towards Non-Core Assets

In 2016, the NBU Board made 11 decisions on renting out the central bank's property throughout Ukraine:

- in four oblasts, the lessees had already concluded lease contracts with the State Property Fund of Ukraine (in Kherson, Ternopil (2 lessees), Kharkiv (2 lessees), and Lviv oblasts, with a total area of 4,267.75 sq. m.)
- in early 2017, lessees in five oblasts made preparations to enter into lease contracts with regional offices of the State Property Fund of Ukraine
- the NBU obtained requests from a number of state authorities and commercial banks regarding the lease of premises in three oblasts, and the regulator is considering these requests.

In 2016, the NBU worked to remove non-core assets from the regulator's focus:

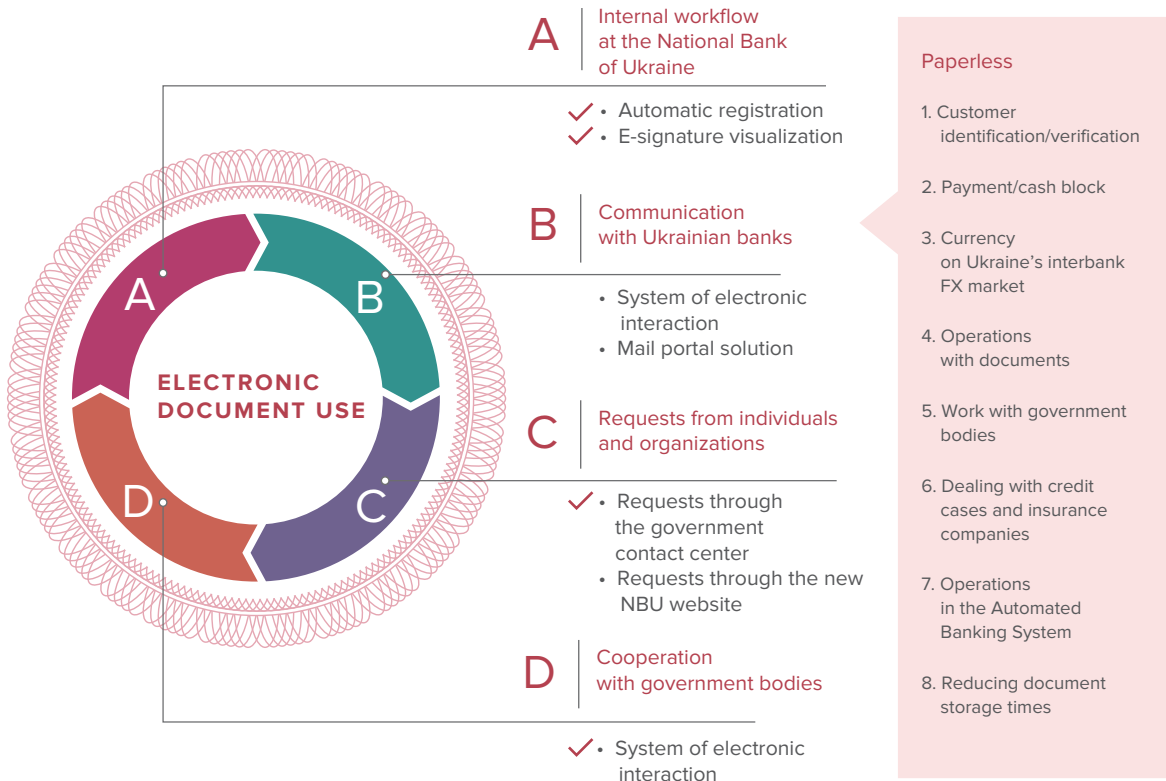
- the regulator made 10 decisions in this regard last year
- the NBU prepared and submitted to the State Property Fund of Ukraine documents regarding the disposal of six non-core assets
- three properties are being prepared for transfer
- the NBU requested that the State Property Fund include in its list of assets to be privatized an unfinished recreational complex called *Prykarpattia*.

The Use of Electronic Documents at the NBU

In 2016, the NBU managed to reduce the use of internal and external paper documentation in four focus areas:

- the NBU saw a 30% increase in internal electronic document use
- over 60% of all correspondence with banks was conducted electronically
- processed over 600 electronic files through a system of electronic interaction with state authorities in Q4 2016
- the number of registered and processed electronic requests from individuals and businesses grew by 13 times.

Electronic document use at the NBU



In an effort to promote the use of electronic documents, the NBU worked closely with the State Agency for E-Governance, the Central State Archive, the Ministry of Justice, the State Migration Service, and other state authorities. In the fall of 2016, the NBU launched an exchange of electronic documents with other public authorities, after joining the System for Electronic Interactions for bodies of the executive branch of government.

To promote the use of electronic documents, in 2016 the NBU became an active participant in the Paperless project, initiated by the Independent Association of Banks of Ukraine. The project's primary goal is to shift to the use of electronic documents and to simplify procedures. The project's implementation is outlined in the updated Comprehensive Program of Ukrainian Financial Sector Development Until 2020.

Communications Policy: Transparency and Partnership

Strategic Communications

In 2016, our communications were aimed at increasing cooperation with stakeholders. Similar to the previous year, the Board of the NBU and top managers participated in panel discussions and provided expert opinions, offering explanations of NBU policy. The intensity of communications doubled from the previous year; in 2016, NBU Board members and top managers participated in 270 public events. Taking their cues from the best and most progressive central banks around the world, the NBU's top management increased their interaction with business representatives and regional managers.

Reports to parliament and at meetings of the Verkhovna Rada committees remain an important element of public accountability. In February 2016, NBU Governor Valeria Gontareva presented at the plenary meeting of the country's highest legislative body, explaining the central bank's decisions and actions to members of parliament and to the public. Members of the NBU Board and heads of operating units participated actively in the work of the Parliamentary

Committee on Financial Policy and Banking. In 2016, they participated in 23 of the committee's meetings.

An effective communications policy is a key tool in the NBU's mission to ensure price stability and financial stability. The management of inflation expectations, which can be guided through effective communication, is an instrument that helps the central bank implement its mandate. To that end, the volume of communications on statistical reporting and regular NBU reports increased significantly in 2016. Each key report (Inflation Report, Financial Stability Report, and Banking Sector Report) is published based on a schedule and accompanied by public communications: press releases and meetings with media and experts.

The NBU in May 2016 introduced a new element of its communications efforts: its first research conference. The development of a visual identity, supporting PR, and special events related to the conference were aimed at fostering a positive image for the NBU on the global stage as a major center of economic thought among the central banks. The objectives were similar with the IMF-World Bank Constituency Meeting in Kyiv in June 2016.

Clear and understandable communications are strategically important in defining the vision of the National Bank of Ukraine as a modern central bank that is pursuing integration with the European community.

Transparency and communication increase the effectiveness of policy implementation

and the central bank's accountability. Data disclosure, overviews of activity, and explanations of decisions allow the central bank to form market expectations and forecast market behavior; economic agents are then able to make informed and effective economic decisions.

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YEARS OF CURRENCY REFORM

The NBU's Work with Media

The NBU's responsibility in communicating with mass media is another important area. In 2016, NBU representatives gave 75 interviews for TV, radio, web-based media, and printed publications, responded to 1,010 requests for information from the media, and held 25 press conferences and briefings. The NBU also published 443 press releases.

The NBU began fact-checking publications and posting the results on its website and on social media as a way of responding to information risks and fake news.

We also introduced longreads and landing pages on the official NBU site. We also introduced longreads and landing pages on the official NBU site, dedicated to the clean-up of the banking system and various events, particularly international conferences.

The Official Website: Reliability and Openness

The NBU's official website is a key communications channel and is constantly updated in order to meet the information needs of the public and to communicate NBU policy in a high-quality manner. In 2016, the website was updated with the following sections: Financial Markets, Research, Current State of the FX Market, and FX Auctions. In total, 3.2 million users visited the website in 2016.

In 2016, work began on a completely new NBU website. The site will be updated in both its content and technical functionality. The new platform will enable access through mobile devices. With the bank now providing access to a larger and growing amount of statistics in the form of open data, the new website will offer a number of effective tools to analyze and interpret the data.

Social Media: New Channels to Communicate with the Public

Responding to new information challenges and based on global trends, the NBU is expanding its pool of social media outlets. Direct communication with consumers of information can build confidence and increase understanding. To achieve this goal, the NBU began developing adapted content and visual components. This played a factor in doubling the size of its aggregate social media audience (Facebook, YouTube, Instagram, Flickr, Twitter).

Money Museum: On the Path to Transformation

The transformation of the NBU Money Museum into a modern Information and Communications Center is an important component of the NBU's general communications strategy. In 2016, as in the previous year, the Money Museum worked under the banner *Open Museum – Open National Bank of Ukraine*, simultaneously working on the museum's large-scale transformation (scheduled to open in 2020).

Both the museum's permanent exhibit and the ability to get a behind-the-scenes look at the central bank continued to attract visitors – in 2016, the number of tour group visitors nearly doubled: 5,623 visitors in 256 tours (3,204 visitors in 2015).

Financial Awareness – Developing a Strategy for Ukraine

In 2016, the NBU developed and agreed with the Reforms Task Force the Increasing the Financial Literacy of the Ukrainian Population program, as outlined in the Comprehensive Program of Ukrainian Financial Sector Development Until 2020. Financial sector regulators and stakeholders held two strategic sessions under the patronage of the NBU to define common tasks and an action plan aimed at increasing financial awareness of Ukrainians. Discussions are ongoing.

Human Resources Management and the Development of Human Capital

In 2016, the HR organization focused on automating HR processes, developing a corporate culture and internal communications, and introducing new approaches to talent and knowledge management.

A key area of the second stage of the transformation is the automation of processes. In 2016, the NBU began implementing SAP HR, a modern automated human resources management system. The system integrates processes including organizational structural management, planning and recording working hours, the evaluation of an employee's key performance indicators and competencies, payroll, and reporting.

Development of Corporate Culture

In 2016, the development of a new corporate culture at the central bank was named a key area in the development of human capital. NBU employees themselves developed the target corporate culture model. To that end, the central bank in July 2016 conducted a survey called *The NBU is Us*. The survey lasted two weeks, with over 2,450 employees participating. The survey considered organizational values, the system of motivation and incentives, internal communications and interaction levels, approaches to leadership and decision-making, and attitudes toward and understanding of institutional changes.

The NBU established an internal task force to assess the survey's results. The task force issued a draft model of corporate culture and an implementation plan. The final strategy for the development of a corporate culture over a period of 5-10 years has been approved by the Board of the NBU.

The NBU's aspirational corporate culture is based on the principles of balance, thrift,

innovation, and speed. The culture is based on the NBU's organizational values and developmental strategy.

The NBU's organizational values are also reflected in the NBU Code of Ethics, which was approved in April 2016. The document is the code of norms for the ethical business conduct of employees. Awareness of and adherence to these will help make the right decisions and avoid situations that could damage the reputation of the National Bank of Ukraine.

The NBU's core values:

- Patriotism
- Professionalism
- Transparency
- Integrity
- Partnership.

Internal Communications

In 2016, internal communications evolved into a separate function, and one based on principles of:

- efficiency – an understanding by employees of assigned tasks (personal and institutional), understanding of common goals for best results and peak efficiency
- willingness to embrace change – an understanding by employees of the need for change and their involvement in change processes through transparency and effective communications
- cooperation – an understanding of responsibilities and the active use of vertical and horizontal relations to boost the efficiency of daily work
- transparency – the availability of timely first-hand information about internal events

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YEARS OF CURRENCY REFORM

- involvement and integration, increasing incentives for productive activities.

For the first time, the NBU in 2016 held a large meeting of management and staff, which constituted a new internal communications format designed to give each employee the opportunity to learn from top executives about the NBU's strategic areas of development and major projects.

During the reporting year, the NBU held a series of events for employees, aimed at attracting workers to charitable activity and promoting cooperation between employees and departments. Through these efforts, the NBU's chosen charitable initiative to aid ATO soldiers developed very actively in 2016. NBU employees consolidated their efforts and at their own expense supported their colleagues that served in the ATO zone. These included wounded soldiers in hospitals and soldiers in conflict areas.

Attracting Talent

The National Bank of Ukraine strives to attract young talent with a strong desire to develop and change the country for the better. To attain this strategic goal, the NBU launched an internship program for university students and graduates in 2016.

During an internship, students have the opportunity to work on the development and practical implementation of new ideas or projects under the guidance of tenured employees of the National Bank of Ukraine. Upon the completion of the internship, the intern presents their idea or project.

In 2016:

- internship applicants: 143 students
- accepted for internship: 51 students
- internships successfully completed: 49 students.

Employer Brand

In December 2016, the NBU became the first public sector institution to win first prize in the "Ukraine" category of the HR-Brand 2016 contest. The regulator took part in the contest with the case PERSONal Transformation of the National Bank of Ukraine, which describes the central bank's internal transformation in light of changes in the HR department and HR function.



In addition, in November 2016, CFA Society Ukraine named the National Bank of Ukraine the best employer of 2016. This award is typically awarded to institutions and companies with the largest number of employed CFA professionals. A significant number of NBU employees, including in top management, have attended CFA Institute trainings and are CFA charterholders.

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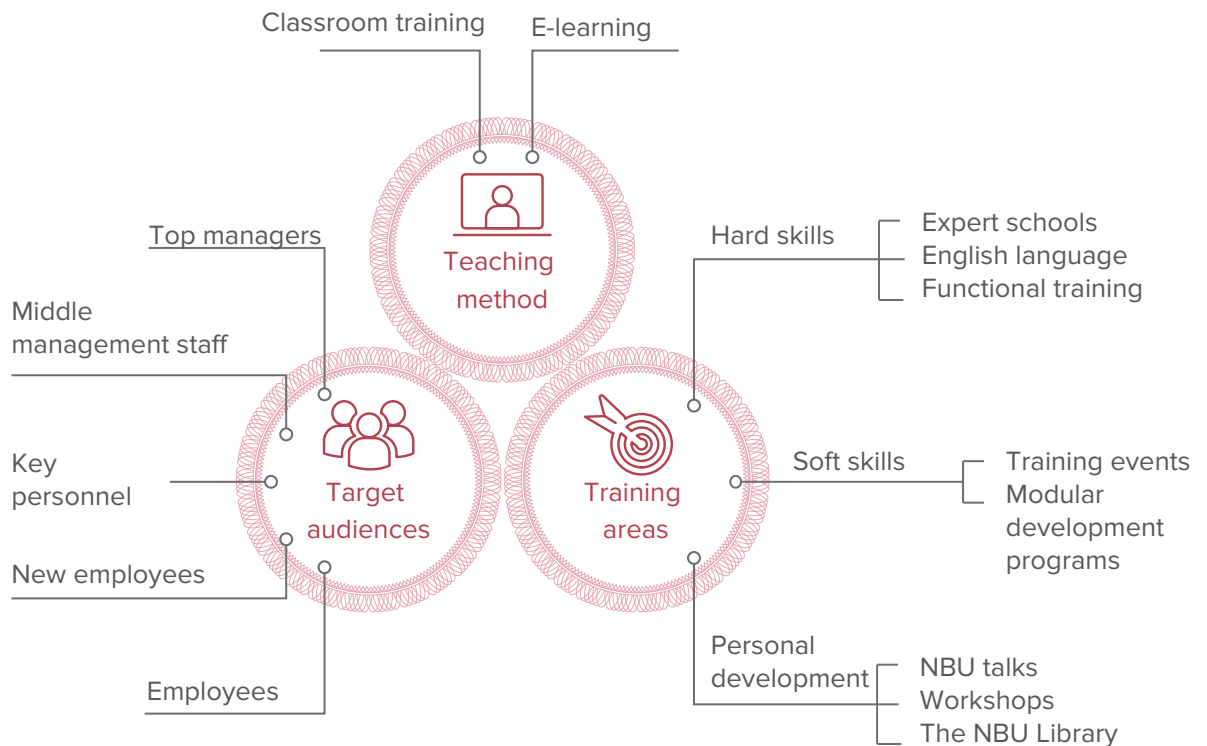
YEARS OF CURRENCY REFORM

Knowledge Management

In 2016, the NBU continued implementing a comprehensive approach to personnel training, which adopts a tailored approach and enables the effective development of employees.

In 2016, 5,957 individuals participated in trainings at the National Bank of Ukraine, including 203 employees of Banknote Printing and Minting Works of the NBU, and 536 employees of Ukrainian banks and other non-bank institutions.

NBU staff training system



In 2016, the NBU introduced a new form of training – internal expert module programs:

- school of Project Management
- school of Prudential Supervision
- school of Internal Audit
- school of Internal Coaching

The goal of these internal schools is to ensure an ongoing exchange of experiences between employees, and building and maintaining professional expertise and horizontal communications.

To additionally support the dissemination of expertise, knowledge, and experience between employees, the NBU in July 2016 established a new event called NBU Talks.

NBU Talks is a series of open lectures by 20 invited speakers and internal experts. The lectures are open to all NBU employees. Seven talks were held in 2016, dedicated to personal performance, analytics, digitalization, communication, risk management, and process and project management. Over 300 NBU employees attended the lectures.

Improving English language skills was one of the priorities in the area of knowledge management in 2016. In total, 227 managers of various levels improved their English skills in 2016. This was done through the use of internal teachers and external providers. In particular, the NBU worked with the NATO Liaison Office in Ukraine and the GoGlobal initiative: 46 NBU employees successfully participated in training programs by the two organizations.

The implementation of organizational skills continued in 2016. Over 246 managers participated in 18 skills trainings, namely Focus on Results, Cooperation, Competence and Development, Self-Discipline, and Proactivity, developed by a team of internal NBU trainers.

Talent Management

In 2016, the NBU introduced a new, modern talent pool at the central bank. The NBU talent pool comprises a group of the most effective, development-focused, and career growth-driven employees of various management levels. Employees are chosen and developed through a special program. They often aspire to career advancement, including to

management positions, to a horizontal move to related functional areas or units), or to project activities as a project manager.

The NBU developed the profile of a talent pool employee based on the World Economic Forum's top leader skills for 2020 as revealed at the WEF's 2015 summit. The first selection to the talent pool was held in 2016; the selection process to identify employees took place in several stages. In all, 37 employees were included in the talent pool, including 22 successors for key management positions. Each employee received an individual personal development plan based on their position and profile. Another 15 employees were identified as developing talents within projects and horizontal rotations.

The NBU also introduced a mentorship program in 2016. Mentoring at the NBU is a systematic process of transferring knowledge, experience, corporate culture, and values from a mentor to a mentee with the aim of his/her personal development. The mentorship program's objective is:

- to develop internal expertise
- to accumulate and further pass on experience and technology
- to pass on institutional knowledge, including approaches to corporate culture.

Based on a three-stage selection process, 28 employees were accepted as mentors into the program. All of them are experts in their field and motivated to transfer their knowledge to others.

Internal Control System

In 2016, the NBU continued the work that began in 2015 on improving the internal control system, to increase the transparency of internal processes. As part of these efforts, the implementation of a new cost management approach enabled savings of more than UAH 300 million in public funds.

Financial Controls

In 2015-2016, the NBU introduced substantial changes to internal control systems in all management areas.

Within the Transformation of the NBU Budgeting Process project, the NBU:

- ensured the proper functioning of the NBU Budget Committee, which manages all stages of the budgeting process
- improved cost control and cost optimization, and the adoption of management decisions
- defined budgetary process nodes, keeping in mind the centralization of NBU functions
- introduced a new cost validation process for internal units
- developed standardized formats for estimating needs and resources based on identified drivers and cost standards
- established a framework for the integration of the administrative cost budgeting process and procurement planning processes. This was made possible by the adoption of codes from Ukraine's "Single Purchase Resource DK 021:2015" national classification into the standards for estimating needs and resources.

In 2016, the Board of the NBU approved the Cost Management Approach, which established new ways of working in terms of this process within

the NBU. The implementation of this concept is based on:

- the sustainable use of natural resources
- the development of cost management processes
- detailed cost-benefit analyses of investment rationale.

In addition in 2016, the NBU improved the format of and procedure for financial management statements, taking into consideration best international practices and the needs of internal customers.

The improved financial management statements are now based on the following:

- a structured package of management reports according to functional areas of the central bank's financial operations. The package includes a comparison of actual indicators with projections for the balance sheet and income and expenditures
- visualization of trends for balance sheet and income and expenditure components
- the creation of a package of management reports for internal units responsible for key financial operations.

The resulting structured package of management reports makes it possible to analyze not only overall performance, but also of the bank's various operating units. The package of management reports is also a tool of secondary control for the accounting of financial transactions and correct representation of financial results.

In 2017, focus areas of improvement include:

- integrating the budgeting process with operating units' strategic planning processes and project activities

- increasing the quality and consistency of income and expense forecasting using established models
- improving efficiency control systems and implementing tools to monitor and control operating units' expenses.

Risk Management

In 2016, the NBU improved its risk management system in accordance with the recommendations of the IMF mission, as well as international standards and practices.

The NBU's comprehensive risk management system is an integral part of all activities of the central bank and enables consistent and transparent risk management across the organization.

The NBU's risk management system defines the roles and responsibilities of key parties in the risk management process, and includes procedures, tools, and methods used by the NBU and in management reporting.

The risk management process is supported through an active culture of risk management, which recognizes the need for thorough analysis and risk management in all processes at the NBU.

In 2016, the NBU focused on improving risk management procedures, tools, and methods in areas outlined above.

Credit Risk Management

In 2016, the NBU completed a project to increase the efficiency of the lending process and implemented high-level processes that govern inter-unit cooperation as part of three key processes:

- the process of analyzing and approving loans to banks
- the process of administering and monitoring loans
- the process of working with distressed assets

and taking possession of collateral acquired by the NBU.

In order to assess the level of credit risk, increase disclosure of the credit quality of financial assets, and improve the disclosure of information according to IFRS, the NBU performed backtesting, updated internal methodology for defining borrowing banks' credit ratings, and revised the profile of the probability curve for Ukrainian banks' defaults.

To improve the method of calculating impairment allowances for loans to banks and other borrowers, the NBU changed internal methodology on the process for assessing financial risks and preparing information regarding the formation and use of NBU reserves to cover financial risks related to asset impairments.

Market Risk Management

In 2016, the NBU moved to increase the efficiency of market risk management, in particular through the implementation of:

- an approach for managing assets and liabilities in managing foreign reserves. Asset and liability management involves managing activities and financial risks by comparing the financial characteristics of assets and liabilities (both on- and off-balance sheet items)
- financial risk tolerance of foreign reserves (market, credit, and liquidity), a system of limits for financial risks and other benchmarks for international reserves, and procedures for monitoring and escalating deviations
- a new structure and procedure for preparing the Investment Declaration for foreign reserves
- a monthly management report on the management of foreign reserves to be considered by the NBU's Assets and Liabilities Management Committee.

The goal is to assess compliance with risk tolerance and other requirements of the Investment Declaration of foreign reserves

- methods and procedures for defining haircuts for FX purchases/sales through swaps
- a new process for checking pricing for foreign reserves transactions with respect to their compliance with the market, i.e. ensuring that transactions are conducted at fair value, reflecting objective market conditions at the time of the transaction
- a new process for credit risk management for foreign reserve transactions, which allows:
- the identification of all credit risks during a foreign reserve transaction
- the use of reliable methods to assess foreign reserve credit risk
- managing and reporting on identified foreign reserve credit risks to ensure a proper understanding of the credit risks accepted by the NBU
- controls and reporting on compliance with all defined limits and other control benchmarks (including the procedure for escalating identified violations).

The NBU is continuing to develop new methodology and processes to assess the fair value of financial derivatives on NBU transactions.

Operational Risk Management

In 2016, the NBU improved the existing operational risk management system, taking into account the recommendations of the Basel Committee on Banking Supervision and the practices of leading central banks around the world.

Operational risk management activities were focused on the following areas:

- developing a business continuity management system

- strengthening internal controls
- independently evaluating operational risks and control tools for NBU processes
- managing key operational risk indicators
- managing operational risk events.

The NBU's business continuity management system is compliant with international standards (ISO 22301, ISO 27031, etc.). This will allow the NBU to mitigate the negative consequences of unforeseen events on the central bank and on the banking system, and will enable a more rapid recovery of normal operations.

NBU employees are trained regularly to increase awareness in identifying and preventing operational risks, but also to improve the corporate culture regarding operational risk management and internal control systems.

Resolution of Problem Assets

In 2016, the central bank continued building an effective process for resolving the NBU's problem assets.

In particular, the NBU, the Ministry of Economic Development and Trade of Ukraine, the Deposit Guarantee Fund (DGF), and international non-governmental organization Transparency International signed a memorandum of cooperation covering the creation in Ukraine of a transparent and efficient mechanism for selling bank assets during liquidation. Those assets, including those provided as collateral to the NBU, will be sold through the ProZorro. Sale system.

In addition, in 2016 the NBU and DGF worked to bring in foreign trading platforms, which will open the door to foreign potential buyers of banks' property. The first sales on these platforms will take place in mid-2017.

Overall in 2016, the NBU brought in more than UAH 4 billion. The loans that were issued to Bank Forum PJSC, CB Khreschatyk PJSC, and Inprombank PJSC were repaid in full.

Internal Audit

In 2016, the NBU Internal Audit Department audited corporate governance, risk management, and internal control processes; the audit results will enable an improvement of the processes.

The audits of key NBU processes were conducted in accordance with the International Standards for the Professional Practice of Internal Auditing, approved and published by the Institute of Internal Auditors.

In 2016, 29 audits were carried out to assess the effectiveness of risk management and internal controls in the main 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 2016 in accordance with the Plan for Internal Auditing at the NBU's operating units, which was developed on the basis of risk-based approaches to the selection of audit areas. The planned audits covered all functional areas of NBU activity and were conducted on processes.

In 2016, the NBU Council, which holds a legal mandate to oversee the NBU's internal control system, resumed its work. To assess the reliability and effectiveness of the internal control system, the NBU Council established the Audit Committee, which began working in November 2016.

In addition, in 2016, the National Bank of Ukraine:

- transformed internal audit processes
- established new ways of conducting audits in the NBU system, based on best practices from the International Standards for the Professional Practice of Internal Auditing
- created an internal Audit School, which enables the continuous professional development of the central bank's auditors
- brought the documents that regulate the operations of the Internal Audit Department (approved by the NBU Council in January 2017) in-line with the Law of Ukraine *On the National Bank of Ukraine*. These changes will enhance the independence of internal audit functions and increase the quality of internal auditing at the NBU.

The NBU Internal Control System

1st level control	<ul style="list-style-type: none"> • Employees of all NBU operating units are responsible for controls • Employees bear the responsibility for risks related to their duties 	Continuous control
2nd level control	<ul style="list-style-type: none"> • Internal control functions are responsible for control 	
3rd level control	<ul style="list-style-type: none"> • The Internal Audit Department is responsible for control 	Periodic control

20

YEARS OF CURRENCY REFORM

“Clear skies do not fear lightning and thunder”

Hryhorii Skovoroda

06 CONSOLIDATED FINANCIAL STATEMENTS
FOR 2016

Key Financials of the National Bank of Ukraine

Improving Accounting and Financial Reporting
at Ukrainian Banks

National Bank of Ukraine Consolidated Financial
Statements for the Year Ended 31 December 2016

06 Consolidated Financial Statements for 2016



We are consistent and logical in making decisions,
open, and responsible
TRANSPARENCY – a key value of the NBU

20
YEARS OF CURRENCY REFORM



Chief Accountant, Director of the Accounting Department Bohdan Lukasevych



“Our goal is the same – to continue our way towards European integration. For this, we need to harmonize our financial statements with international standards”

The national Bank of Ukraine has been consistently working to integrate with European Union relying on the best practices of the European Central Bank. Implementation of IFRS 3 in accounting and reporting demands that NBU meets new requirements for improvement of the current standards and introduction of new ones. Therefore we are steadily moving ahead.

In 2016, the NBU embarked on a new initiative to improve financial reporting – we will implement the requirements of IFRS 9 Financial Instruments in accounting and reporting standards at the National Bank of Ukraine and at Ukrainian banks.

This is a strategically important project involving not only experts in accounting, but also risk management and IT, as well as banks' operating units.

The NBU has been working on transitioning the standards of developing and transmitting financial statements to XBRL format. This standard will allow the regulators of the Ukrainian financial sector to build modern technological processing system of financial statements in accordance with best practices of financial sector regulators of the USA, Europe, Asia and Australia.

We aim to make financial statements clear and understandable for market participants and for consumers of financial services. The NBU believes that consumers of financial services need facts and proven information in order to make responsible financial decisions. Financial statements from Ukrainian banks should be a source of that type of information.

Key Financials of the National Bank of Ukraine

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

The NBU's consolidated financial statements comprise the assets, liabilities, and profits or losses of the central bank and its subsidiaries and associated companies.

The central bank's total assets had increased by about 11%, to UAH 940.5 billion, by late 2016.

In 2016, the NBU continued to execute its functions as a central bank, which similar to other central banks has certain assets, liabilities and equity capital items.

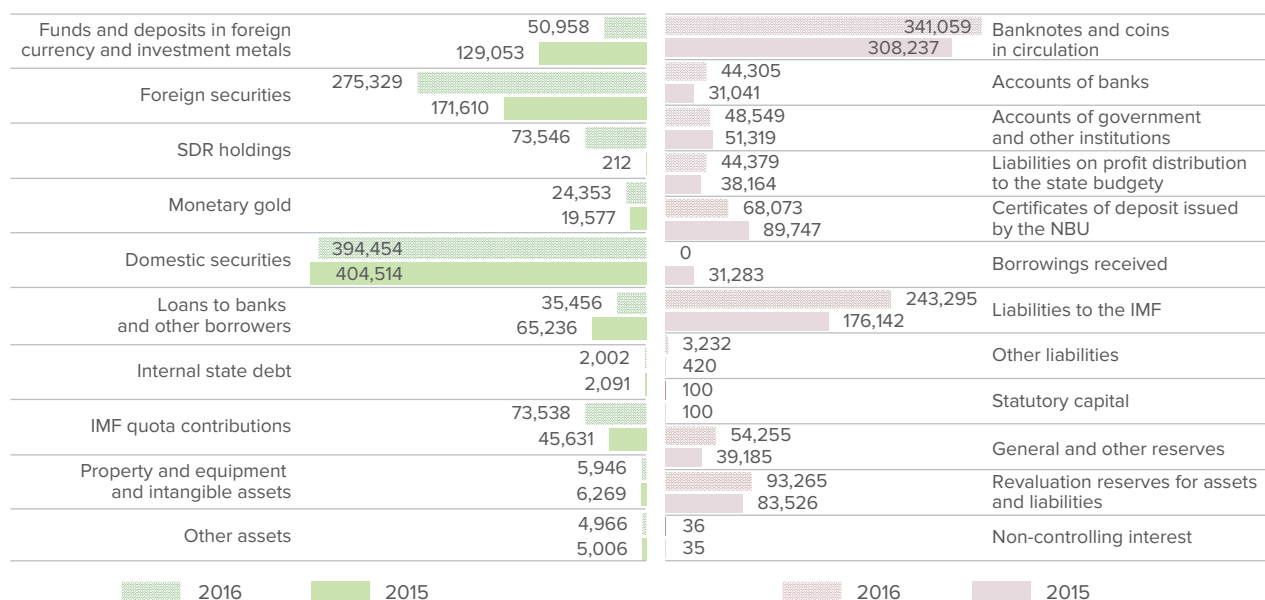
The NBU's assets are mainly comprised of:

- funds and deposits in foreign currency and investment metals
- foreign securities
- SDR holdings
- domestic securities
- loans to banks and other borrowers.

The NBU's liabilities mainly include:

- banknotes and coins in circulation
- accounts of banks, government and other institutions
- certificates of deposit issued by the NBU
- liabilities on profit distribution to the state budget
- liabilities to the IMF.

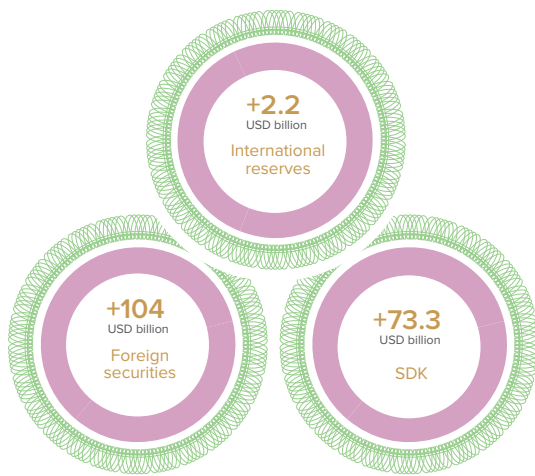
NBU assets and liabilities in 2015-2016, UAH million



The NBU's assets and liabilities changed significantly in 2016.

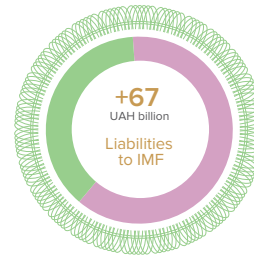
The NBU's efforts to increase international reserves pushed these assets up from USD 13.3 billion in late 2015 to USD 15.5 billion in late 2016:

- the NBU purchased SDR 1.8 billion and received SDR 0.4 billion from the IMF, which increased the central bank's SDR holdings by over SDR 2 billion or UAH 73.3 billion in the equivalent
- foreign securities were up by about 60% to UAH 275.3 billion or USD 10.1 billion in the equivalent.



The growth was driven by a 78% increase in foreign securities purchases and nearly a 100% increase in SDR holdings. A 22% revaluation of foreign securities to account for the hryvnia's depreciation also contributed to the gain.

Driven by international reserves growth, the NBU liabilities increased, in particular, liabilities to the IMF surged 38% up to UAH 243.3 billion (USD 8.9 billion in equivalent) due to disbursements under the Extended Fund Facility program.

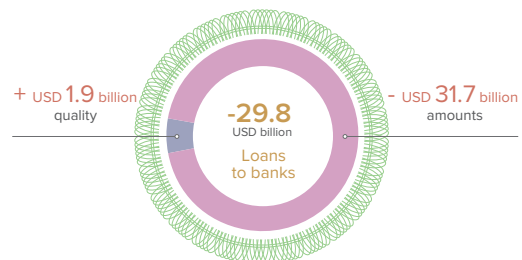


The NBU's national currency assets are mainly comprised of domestic securities, which decreased by UAH 10 billion or 2.5% in 2016, to UAH 394.5 billion. This, together with the rise in international reserves, reduced the percentage of domestic securities in the central bank's total assets to 42% in 2016, down from 48% in 2015. Of the domestic securities, 99% are government securities held to generate cash flows. These are accounted at their amortized cost.

The NBU's loan portfolio shrank by 45.7% yoy in 2016, driven by two main factors. The value of loans excluding provisions (loan debts) dropped by UAH 31.7 billion, to UAH 83.9 billion. Asset quality deteriorated: Impaired loans accounted for 65% of the portfolio, with the loan loss provision ratio rising to 68% in 2016, up from 59% in 2015.

Apart from liabilities to the IMF, other liabilities that changed materially:

- foreign currency loans from other central banks, which were repaid in full
- certificates of deposits, which decreased by 24%.

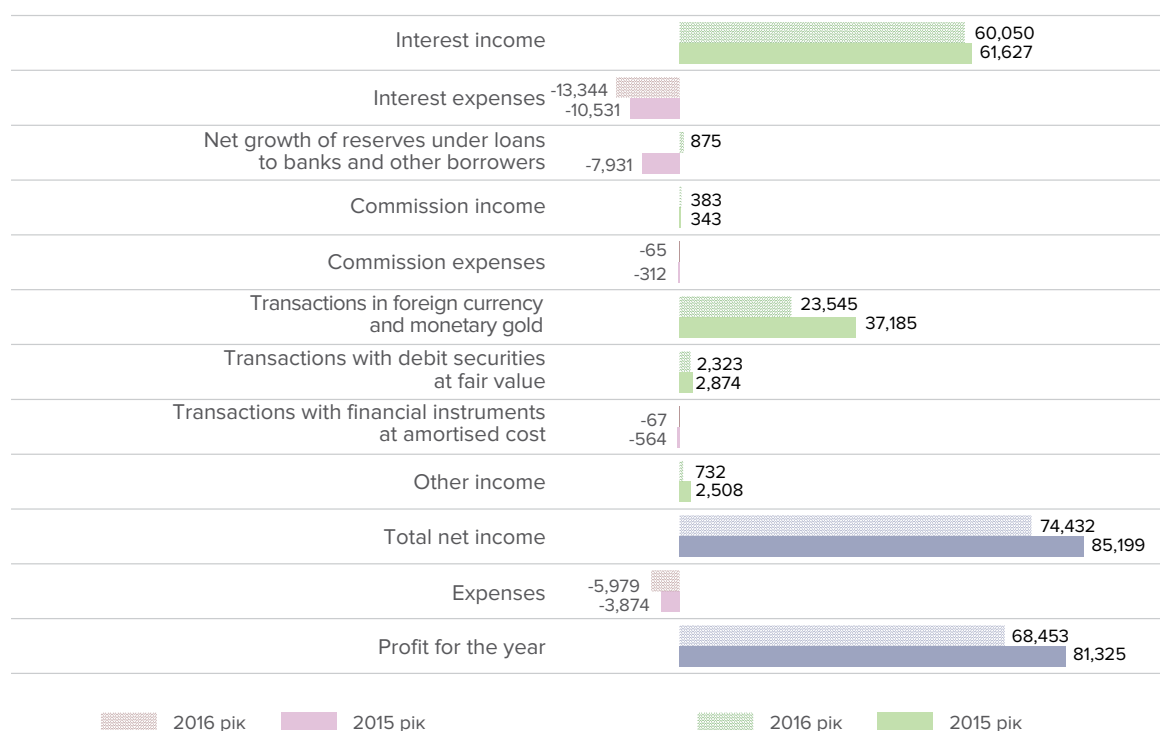


Profits or losses

Interest income and foreign exchange differences – profit from the revaluation of monetary assets and liabilities due to changes in the official exchange rate – are the NBU's main sources of income.

Interest income, mainly from domestic securities and loans to banks, was little changed in annual terms at UAH 60 billion, despite a drop in the volume of assets.

The NBU's profits or losses in 2015 through 2016, in UAH millions



Interest expense increased 27% to UAH 13.3 billion in 2016, primarily after the NBU placed certificates of deposit and on an increase in interest-bearing debt to the IMF.

The NBU in 2016 released UAH 0.9 billion in loan

loss reserves after a significant portion of the impaired loans was repaid.

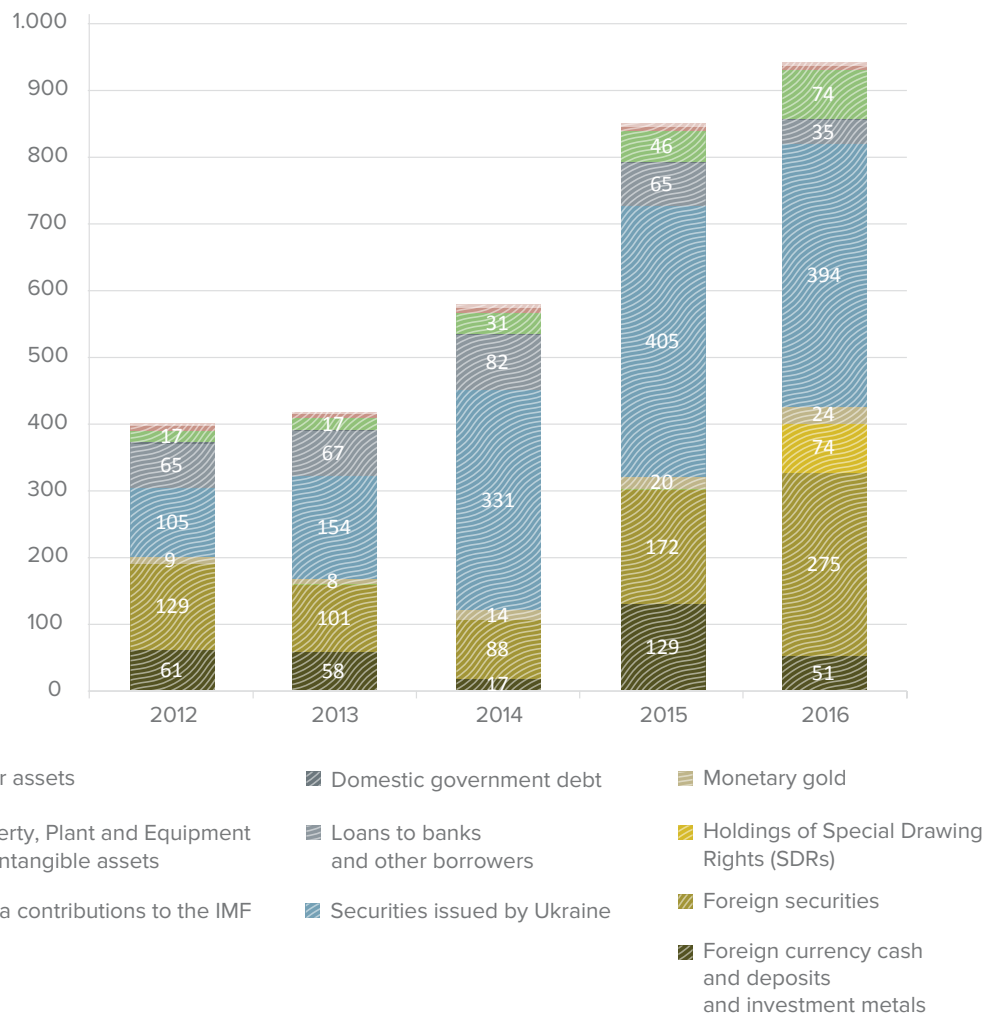
Net interest income (including the released impairment allowances) totaled UAH 47.6 billion last year, 10% higher yoy.

The NBU's results were significantly affected by FX fluctuations after switching to a floating exchange rate regime. In 2015, income from FX volatility amounted to UAH 37 billion (on total annual earnings of UAH 81 billion) on the back of the hryvnia's depreciation against foreign currencies and the NBU's large-scale FX interventions in that year. In 2016, the FX income decreased by 1.6 times

to almost UAH 24 billion (on total annual earnings of UAH 68 billion), driven by a slower depreciation of the hryvnia against foreign currencies.

Overall, the structure of assets has changed over the past five years, with growth in Ukrainian-issued securities, mainly in domestic sovereign bonds, as well as growth in international reserves.

The composition and growth of NBU assets over 2012-2016, UAH billion

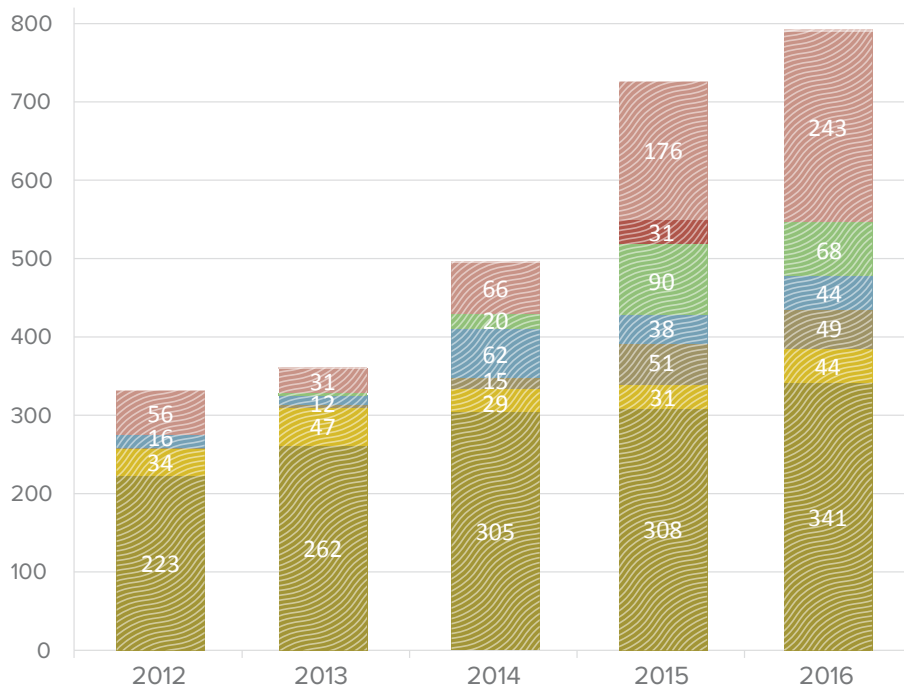


The NBU's liabilities are becoming more diversified, even as banknotes and coins in circulation still account for the lion's share (as the major liability for any central bank acting as the issuer of national currency). That item's proportion of the total has decreased significantly in recent years

to less than half of the currency on the balance sheet in 2015-2016.

In recent years, external borrowings have grown significantly, especially liabilities to the IMF. A large part of the NBU's liabilities includes transfers of its profit to the state budget.

The composition and growth of NBU liabilities over 2012-2016, UAH billion

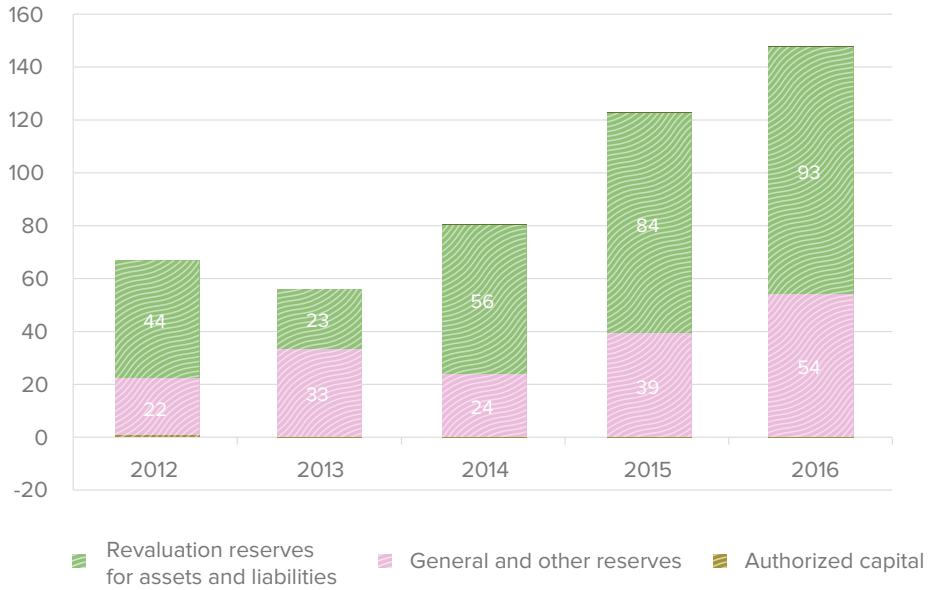


- Other liabilities
- Certificates of deposit issued by the NBU
- Cash of government and other institutions
- Liabilities to the IMF
- Liabilities on the transfer of profit to the state budget
- Cash of banks
- Loans
- Banknotes and coins in circulation

The NBU's equity, which is the residual value of assets after deducting liabilities, is formed both through government contributions in the form of deferred unrealized revaluation of assets and

liabilities of the NBU, including as a result of exchange rate fluctuations, and part of profits retained by the NBU as reserves as required by law.

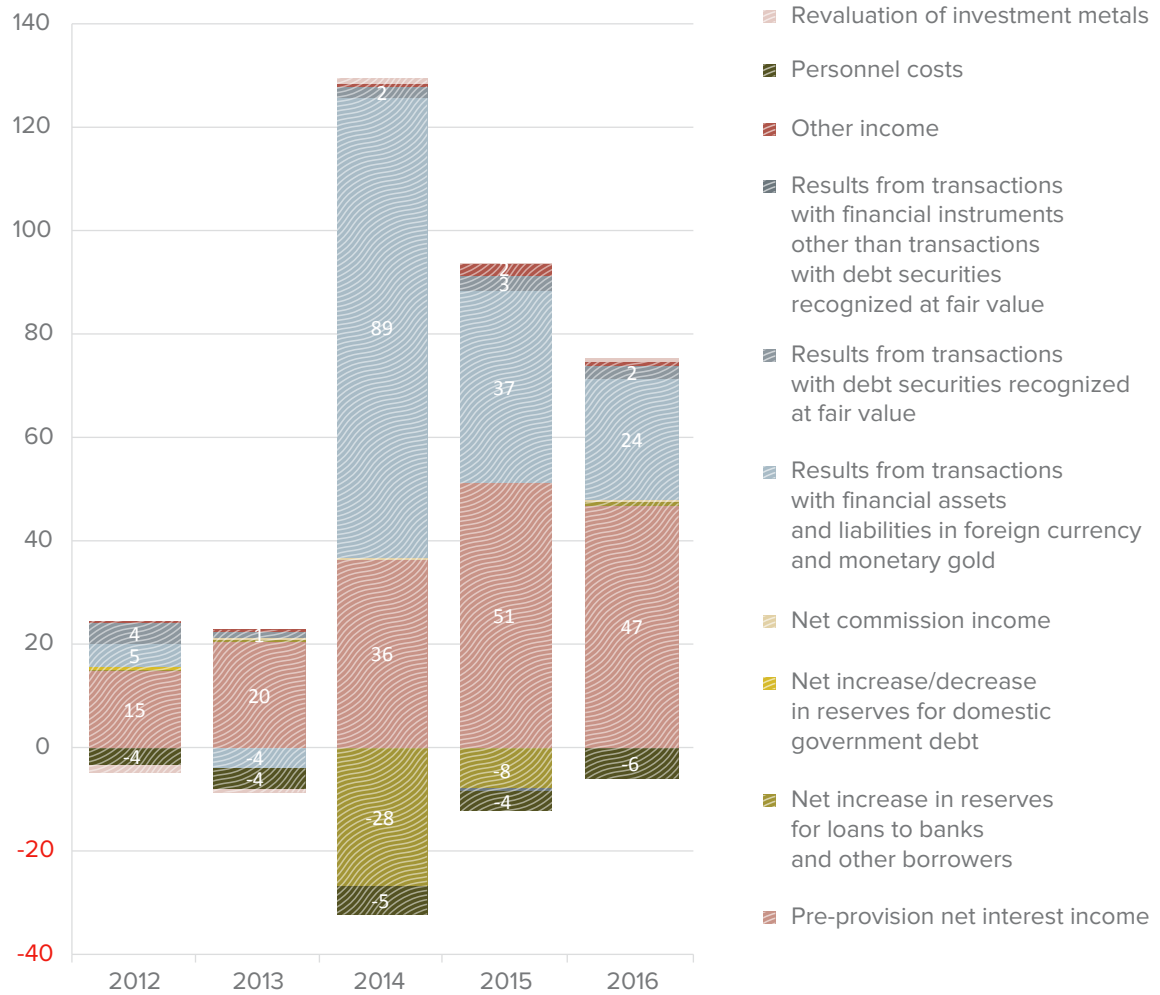
The composition and growth of NBU equity over 2012-2016, UAH billion



The structure of the NBU's financial results changed significantly over the past three years, particularly due to the greater impact of FX differences after switching to a floating exchange rate. However, the proportion of

the FX rate impact on total earnings has been declining, with net interest income – typically the largest income item for a bank – taking over.

The composition and growth of NBU income and expenses over 2012-2016, UAH billion

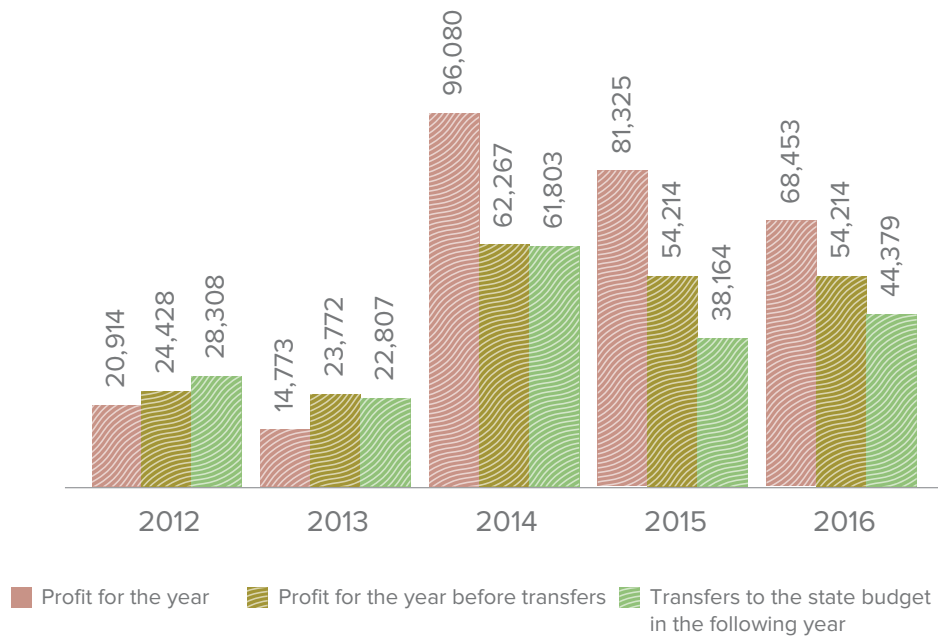


Payments to the State Budget

In 2016, the NBU transferred UAH 38 billion to the state budget. The NBU also recognized its liability to transfer UAH 44.4 billion in earnings

to the budget in 2017. The NBU's remaining distributable profit of UAH 15 billion will be set aside to create general reserves after the central bank's financial statements are approved by the NBU Council.

Transfers by the NBU to the State Budget of Ukraine over 2012-2016, UAH million



Improving Accounting and Financial Reporting at Ukrainian Banks

In 2016, we launched the process of publishing quarterly and annual operating data by Ukrainian banks on the NBU's official website. The NBU ensured the compilation and publication of accurate interim financial statements.

The NBU was also working on further improving the presentation of banks' operations in the accounting and financial reporting in accordance with International Financial Reporting Standards (IFRS):

- the guidelines for calculating the effective interest rate on financial instruments at Ukrainian banks were enhanced with new examples
- the accounting and reporting of transactions with embedded derivatives now adheres to IFRS. This has allowed the accounting of transactions that deal with indexed financial instruments.

The NBU improved its reporting on cash reserves deposited with authorized banks by introducing specific off-balance-sheet accounts to the Chart of Accounts of the banks of Ukraine. This was done in accordance with the new Policy on Cash Circulation in Ukraine.

Throughout 2016, we held a series of seminars and workshops with international experts to coordinate the work being done to introduce the new IFRS framework. In addition, the NBU started working on implementing the requirements of IFRS 9 Financial Instruments in accounting and reporting standards at the National Bank of Ukraine and at Ukrainian banks. The use of this standard is mandatory from 1 January 2018 and replaces International Accounting Standard 39 Financial Instruments: Recognition and Measurement.

To this end, the NBU has:

- Held a series of trainings for central bank staff to study the provisions of IFRS 9
- Communicated to banks an explanation of the key requirements of IFRS 9; conducted a survey of banks on the work performed for the introduction of IFRS to get a sense of the banking system's preparation.

The development and translation into Ukrainian of the basic version of IFRS taxonomy is completed; it was approved at a meeting of the Methodological Council of Ukraine's Ministry of Finance and approved and published by the International Accounting Standards Board (London, UK).