



National Bank
of Ukraine

Annual Report on the Oversight of Payment Systems

2018



Introduction

The Annual Report on the Oversight of Payment Systems for 2018 (hereinafter referred to the “Report”) was drafted in line with the functions of the National Bank of Ukraine (hereinafter referred to as the “NBU”) oversight of payment and settlement systems (hereinafter referred to as “oversight of payment systems”, “oversight”) as prescribed in Article 7 paragraph 29 of the Law of Ukraine *On the National Bank of Ukraine*.

The report has been published for the first time in 2019. The report aims to boost the transparency of the NBU’s oversight as one of the key functions of the central bank. The goal is to ensure the secure and effective operation of payment systems that serve the interests of individuals, businesses, and the government. The stable operation of the financial system and the national economy depend on the effective functioning of payment systems. Increasing the reliability of payment infrastructure is one of the key goals of oversight in ensuring financial stability.

The report sets out the main framework for the oversight of payment systems in Ukraine and their development prospects, changes in the payment systems market, key performance indicators of payment systems, and more.

The report was drafted by the NBU’s Payment Systems and Innovations Department.

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1. General provisions

1.1 Oversight of payment systems in Ukraine

International financial institutions, in particular the Bank for International Settlements, the World Bank, and the European Central Bank recognize the leading role of payment systems in supporting a country's financial stability. Oversight is therefore one of the key functions of central banks in most countries. The oversight function aims to ensure the stable and effective operation of payment systems, which are an integral part of a country's financial system. Every day, payment systems process large amounts of funds from business entities; any disruption in the operation of a payment system carries risks.

The operating risk inherent in payment systems is related to the complexity of the processes and instruments, the rapid development of new technologies, the development of online banking services, and more. Risks incurred by payment systems, especially systemic risks, can cause financial and economic instability.

According to the Law of Ukraine on Payment Systems, the NBU oversees payment systems to ensure the continuous and effective operation of payment systems using the following means:

- monitoring payment systems
- assessing payment systems for their compliance with Ukrainian law and PFMI
- inducing change (as needed, issuing instructions and recommendations on improving operations and imposing corrective measures if violations are found).

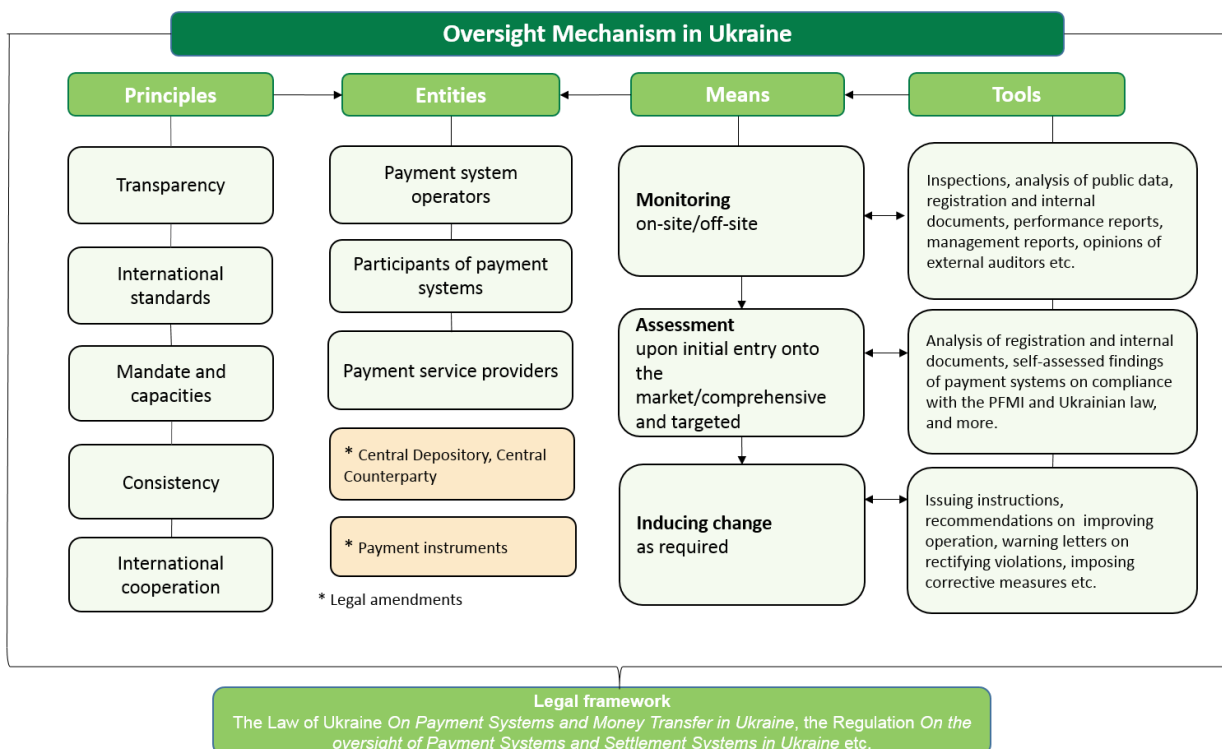
Currently in Ukraine, the following entities are subject to oversight:

- payment system operators
- participants in payment systems
- payment service providers (clearing and processing institutions, and other entities authorized to provide services or perform operational and other technical functions within payment systems).

The NBU intends to expand the oversight function to other financial market infrastructures like the central depository and the central counterparty, as well as to payment instruments. That expansion will require legislation to be adopted (see Section 4 for more information).

The NBU conducts payment system oversight based on the following international principles:

- transparency in disclosing oversight policy and general conditions to the payment systems
- applying the PFMI to payment systems
- having a mandate and possessing the capacity for effective oversight
- consistency in the requirements imposed on all payment systems, including those operated by the NBU.
- working with government authorities and foreign central banks.

Figure 1. Oversight in Ukraine¹

1.2 Development of oversight in Ukraine in 2018

Key amendments to the regulation of payment systems oversight

In 2018, the NBU strengthened its oversight of payment system operators, participants, and payment service providers.

The NBU Board adopted Resolution No. 61 *On Amendments to Some Regulations of the National Bank of Ukraine*² on 7 June 2018.

In particular, the regulation sets requirements for the organizational and technical measures that overseen entities must introduce to ensure operational continuity.

- setting requirements to the organizational and technical measures, that overseen entities must take in order to ensure the operational continuity. The NBU now requires entities and individuals to report violations in the operations of payment systems, payment system participants, and payment service providers. Those reports must describe the reasons, consequences, duration of violation, measures to restore proper operations, and more
- improve the required information that overseen entities must provide on their websites, on self-service kiosk displays, and at cash acceptance/payment self-service kiosks
- clearly identify the information that overseen entities must record after a breach of operational continuity and the mechanism for submitting that information to the NBU
- improve requirements for data storage on each money transfer transaction executed in the payment system
- require each overseen entity to maintain an official website
- bring the regulation *On the Supervision (Oversight) of Payment Systems and Settlement Systems in Ukraine* in line with Article 58¹ of the Commercial Code of Ukraine regarding the use of stamps.

¹Oversight of the CSD and the CCP includes the verification of operational compliance with PFMI and, as necessary, drafting recommendations to improve performance. Corrective measures will not be applied.

²Resolution No. 61 amends:

Regulation *On the Procedure to Conduct Inspections on Compliance by Oversight Objects with the Requirements of the Laws of Ukraine on Payment Systems in Ukraine* approved by NBU Board Resolution No. 503 dated 9 December 2013

Regulation *On the Application by the National Bank of Ukraine of Enforcement Measures for Violation by Entities Subject to Supervision (Oversight) of the Laws Regulating Payment Systems Operating in Ukraine* approved by NBU Board Resolution No. 524 dated 19 December 2013

Regulation *On Payment Systems and Settlement Systems Oversight in Ukraine* approved by NBU Board Resolution No. 755 dated 28 November 2014.

Expanding the oversight function

With due consideration to PFMI and in line with the recommendations from the IMF's technical mission to Ukraine in 2018³, the NBU Board approved a decision to expand the oversight function. Once the legislative framework is amended, the list of entities subject to oversight will grow to include equity market infrastructures that are viewed as systemically important for the national economy. In Ukraine these entities include:

- the central securities depository (currently the National Depository of Ukraine)
- the central counterparty (Settlement Center PJSC currently handles part of this function).

Oversight of these entities covers the verification of operational compliance with PFMI and, as necessary, issuing recommendations to improve their performance.

At the same time, the NBU will work with the National Securities and Stock Market Commission to bring the operations of those stock market entities in line with PFMI.

Already in 2019, the NBU will conduct a preliminary assessment of the National Depository of Ukraine's operational compliance with the PFMI.

Improving the oversight of payment systems in terms of risk management

In 2018, to introduce risk-based approaches to the oversight of payment systems, the NBU drafted the Guidelines for Risk Management in Payment Systems operated by Ukrainian Banks and Nonbank Institutions.

The document was drawn up to improve the operation of payment systems and decrease risk. The implementation of the Guidelines will improve risk management in the payment systems.

Those guidelines are based on the best international practices of central banks and recommendations from experts from the World Bank's and IMF's missions on payment systems oversight.

The guidelines are intended for practical use by the payment institutions of resident payment systems and will help improve the quality of documents that are submitted to the NBU under the law.

The guidelines contain general information on the risk management system, payment system risks (legal, financial, commercial, systemic, operational, and more), and the mechanisms of their management.

Also, the Comprehensive Program of Ukrainian Financial Sector Development until 2020 includes the continued development of the oversight of payment systems in terms of risk management.

1.3 The payment systems market in Ukraine

Under Article 9 of the Law of Ukraine *On Payment Systems*, the NBU keeps a register of payment systems, settlement systems, the participants of those systems, and payment service providers. In aggregate, this report will refer to it as "the Register". The payment organizations of payment systems, payment systems participants, and payment service providers have the right to operate in Ukraine only after registering their details with the Register.

The NBU records the following in the Register:

- information about a national payment system and an international payment system with a resident system operator once the rules for that payment system have been approved
- information about an international payment system with a nonresident payment system operator once its terms and procedures of operation have been established
- intrabank payment system after being notified by a bank that the system has started operating
- participant in a national payment system and an international payment system with a resident payment system operator after being notified by the payment system operator that it has entered into an agreement with the participant

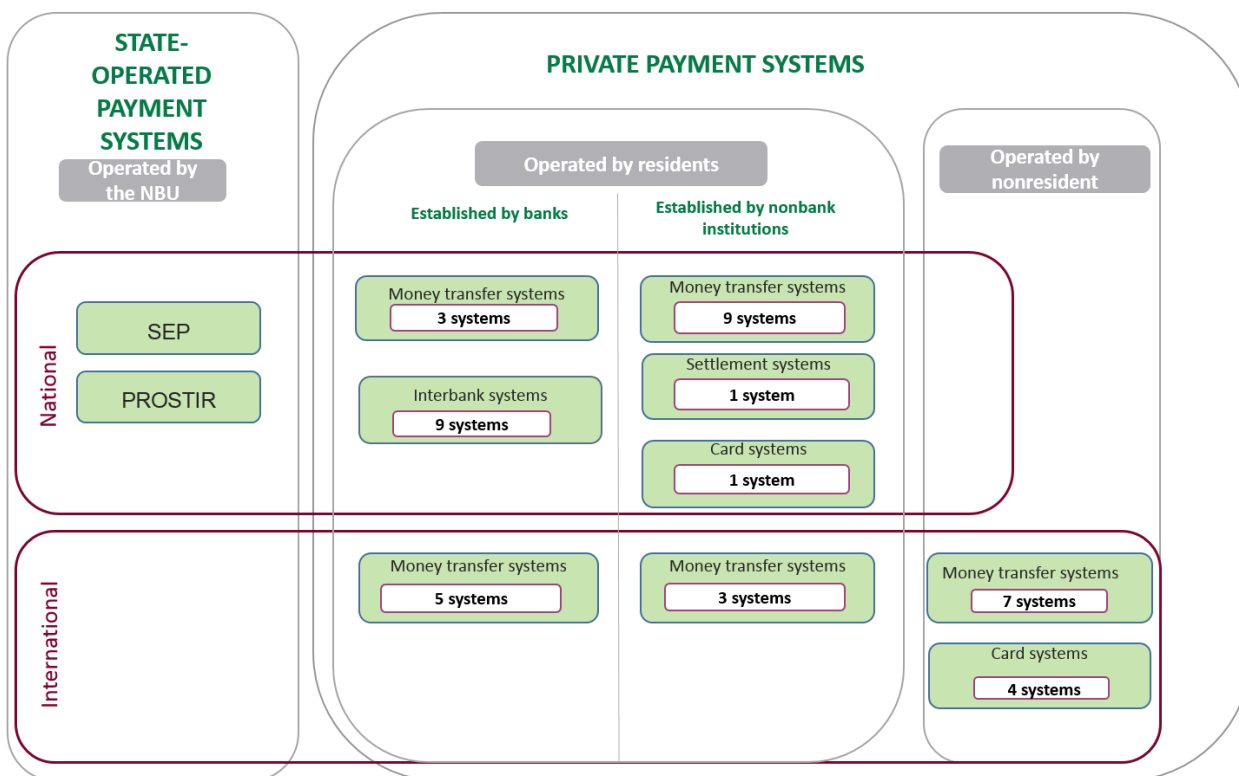
³ International Monetary Fund Report: Strengthening the Payment Systems Oversight Function, June 2018.

- participant in an international payment system with a nonresident payment system operator after registering the agreement on their participation in the international payment system
- payment service providers following the approval of the terms and procedure for its operation.

A list of all the payment systems, participants, and payment service providers recorded in the Register can be found on the [NBU's website](#).

At the end of 2018, Ukraine had 42 national and international payment systems operated by residents and nonresidents, plus two operated by the NBU.

Figure 2. The payment systems market in Ukraine at the end of 2018



2. Monitoring payment systems in Ukraine in 2018

2.1 Developments on the market of payment systems

In November 2018, the NBU approved the terms and conditions of operation in Ukraine for the world's top payment card issuer **UnionPay International** (payment system operator – UnionPay International Co., Ltd. of the People's Republic of China).

Initially, UnionPay International will provide acquiring services and payouts and payments for goods and services for UnionPay cardholders. At a later date, Ukrainian banks are expected to issue UnionPay payment cards.

In addition, UnionPay International and PROSTIR NPS have agreed to issue co-badged cards. Thanks to UnionPay's global network, users of PROSTIR and UnionPay co-badged cards will be able to use the cards in Ukraine and practically everywhere else in the world.

Actual co-badged card issuance under PROSTIR and UnionPay brands will start as soon as agreements are reached with interested issuing banks.

In 2018, the segment of payment systems **operated by residents** saw the following changes:

- **GLOBUS international payment system** (CB GLOBUS PJSC) registered as a new payment system
- the following payment system expanded its range of services and converted from being national into international:

MOSST Payments (VAP-Capital FC LLC) expanded its range of services and converted from a national to an international system.

- The NBU cancelled the registration of:

TYME international payment system (FC OMP-2013 LLC) after a decision by the NBU Board on 14 June 2018, and subsequently cancelled the registrations of all of its participants Grounds for cancellation: the NBU Board decision dated 14 June 2018. Since the NBU cancelled registration of this system, it consequently cancelled registration of all its participants

WebMoney.UA settlement system for currency valuables and financial instruments (a subsidiary of ELMI FC), pursuant to a decision by the National Security and Defense Council of Ukraine⁴ that introduced sanctions on WebMoney.UA

GLOBUS intrabank payment system (CB GLOBUS PJSC), after the payment system registered a new international payment system called Globus

Grounds for cancellation: the notification from the payment system operator on ceasing services of the payment system due to registration of a new international payment system Globus

TheMoney national payment system (CB Finansova Initsiatyva PJSC) for failure to execute a money transfer within a period of 180 calendar days (NBU Board decision on 23 July 2018)

FINEKSPRES intrabank payment system (CB Finansova Initsiatyva PJSC) for failure to execute a money transfer within a period of 180 calendar days (NBU Board decision on 23 July 2018)

ONIX intrabank payment system (Raiffeisen Bank Aval JSC), after the payment system operator halted operations. Grounds for cancellation: the notification from the payment system operator on ceasing services of the payment system.

2.2 Breakdown of payment systems by categories of importance

The NBU breaks down payment systems by categories of importance, in compliance with the international practice for bringing the operations of important payment systems that cover a major share of the market in line with the PFMI.

⁴The decision by the National Security and Defense Council of Ukraine *On Imposing Personal Specific Economic and Other Limiting Measures (Sanctions)* dated 15 March 2017 (enacted by Presidential Decree No. 126/2018 dated 14 May 2018).

To those payment systems classified as important, the NBU applies stricter requirements that are based on PFMI to increase their security and effectiveness.

The NBU also uses the classification information to determine which entities are subject to a comprehensive assessment of compliance with the PFMI, as well as for planning on-site inspections of overseen entities.

The classification criteria to determine a system's importance are based on transaction volumes and on the types of services a system provides.⁵

Table 1. Category of importance for payment systems in Ukraine and their criteria

Category	Criteria
Systemically important	<ul style="list-style-type: none"> > 10% of interbank transfers in the country transfers associated with contracts on government securities on the open market settling liabilities of participants in other payment systems
Socially important	<ul style="list-style-type: none"> > 10% of national and international transfers in the country > 10% of transactions using electronic payments
Important	<ul style="list-style-type: none"> 5%–10% of interbank transfers in the country 5%–10% of national and international transfers in the country 5%–10% of transactions using electronic payments > 5% of domestic transfers > 5% of cross-border transfers provides unique services on the market

The findings of the performance monitoring of payment systems in 2018 show the following:

The SEP NBU remains the only **systemically important** payment system in Ukraine based on 2018 performance.

Table 2 Socially important payment systems

Payment system/payment system operator	Share of transactions of the payment system
Poshtovyi perekaz NPS Ukrposhta PJSC	17% of domestic and cross-border transfers (USD 8.1 billion) by fund transfer systems operated by residents and nonresidents 25% of domestic transfers (USD 5.5 billion) by fund transfer systems operated by residents and nonresidents
FORPOST NPS POST FINANCE LLC * for the first time	11% of domestic and cross-border transfers (USD 8.1 billion) by fund transfer systems operated by residents and nonresidents 16% of domestic transfers (USD 5.5 billion) by fund transfer systems operated by residents and nonresidents

⁵ For more information on the criteria, see Regulation No. 755, section IV, paragraphs 2–4.

MasterCard MasterCard International Incorporated US	61% of all operations using electronic payment means (USD 105 billion) by retail payment systems in Ukraine
Visa Visa International Service Association US	32% of all operations using electronic payment means (USD 105 billion) by retail payment systems in Ukraine
Western Union Western Union Financial Services Inc./Western Union Network (France), SAS US/France	18% of domestic and cross-border transfers (USD 8.1 billion) by fund transfer systems operated by residents and nonresidents 56% of cross-border transfers (USD 2.6 billion) by fund transfer systems operated by residents and nonresidents

The **socially important** category of payment systems saw the following changes in 2018: the FORPOST national payment system (POST FINANCE LLC) entered the category after POST FINANCE LLC left TYME IPS and operated a separate system.

The other payment systems recognized in 2017 by the NBU as **socially important** retained that status in 2018.

Table 3 Payment systems classified as important

Payment system/payment system operator	Share of transactions of the payment system
InterPayService NPS Zaporizhzhiazokservis PJSC	9% of domestic and cross-border transfers (USD 8.1 billion) by fund transfer systems operated by residents and nonresidents 14% of domestic transfers (USD 5.5 billion) by fund transfer systems operated by residents and nonresidents
City24 IPS FC FENIKS LLC	7% of domestic transfers (USD 5.5 billion) by fund transfer systems operated by residents and nonresidents
Finansovyi svit NPS Ukrainska platizhna systema LLC	6% of domestic and cross-border transfers (USD 8.1 billion) by fund transfer systems operated by residents and nonresidents 8% of domestic transfers (USD 5.5 billion) by fund transfer systems operated by residents and nonresidents
MoneyGram MoneyGram Payment Systems Inc. US	7% of domestic and cross-border transfers (USD 8.1 billion) by fund transfer systems operated by residents and nonresidents 20% of cross-border transfers (USD 2.6 billion) by fund transfer systems operated by residents and nonresidents

INTELEXPRESS Microfinance Organization IntelExpress JSC, Georgia	6% of cross-border transfers (USD 2.6 billion) by fund transfer systems operated by residents and nonresidents
RIA CONTINENTAL EXCHANGE SOLUTIONS INC US	6% of cross-border transfers (USD 2.6 billion) by fund transfer systems operated by residents and nonresidents

For the first time, national payment system City 24 (resident) and international payment system RIA (US) were included as **important** payment systems. Meanwhile, based on 2018 results, FLASHPAY (BANK FAMILNY PrJSC) was removed from the category of important payment systems.

The other payment systems recognized in 2017 by the NBU as **important** retained that status in 2018.

2.3 General information on completed inspections

In 2018, as part of its monitoring activities, the NBU conducted:

1) on-site monitoring.

Three payment system operators, six participants of payment systems, one payment service providers were inspected for compliance with Ukrainian law on the operation of payment systems and fund transfers in Ukraine.

The inspections identified serious violations, including the following:

- services provided in violation of the rules for payment systems approved by the NBU
- noncompliance with the protection of consumer rights in terms of fund transfers
- failure to ensure business continuity and information security
- failure to recognize all transactions on fund transfers in reporting systems
- misrepresentation of financial statements
- noncompliance with ratios and restrictions as required by law and under the rules approved by the NBU.

Based on the results of the inspections, the NBU required the entities to rectify the violations and communicate in writing about corrective measures, as required in Article 41 of the Law on Payment Systems.

2) off-site monitoring.

During off-site monitoring, the NBU checked for compliance by overseen entities with legal requirements, especially for the following:

- commencement of operations by overseen entities only after registering their data in the Register
- operational compliance by payment systems and participants with the rules set by the payment system operators and approved by the NBU
- protection of the rights of payment systems users, including notifications of the operation of payment systems
- proof that entities are not working with international payment systems that are subject to sanctions.

Based on the findings of its off-site monitoring activity, the NBU made recommendations to overseen entities on bringing their operations in line with legislation.

2.4 Analysis of performance indicators of payment systems in Ukraine

In 2018, the following payment systems operated in Ukraine:

- SEP NBU
- card payment systems (MasterCard, Visa, NPS PROSTIR, and others)

- money transfer systems, including:
 - 8 systems operated by banks
 - 12 systems operated by nonbank institutions⁶
 - 8 interbank systems
 - 7 operated by nonresidents.

Figure 1. Value of payments and transfers within Ukraine in 2018⁷, million

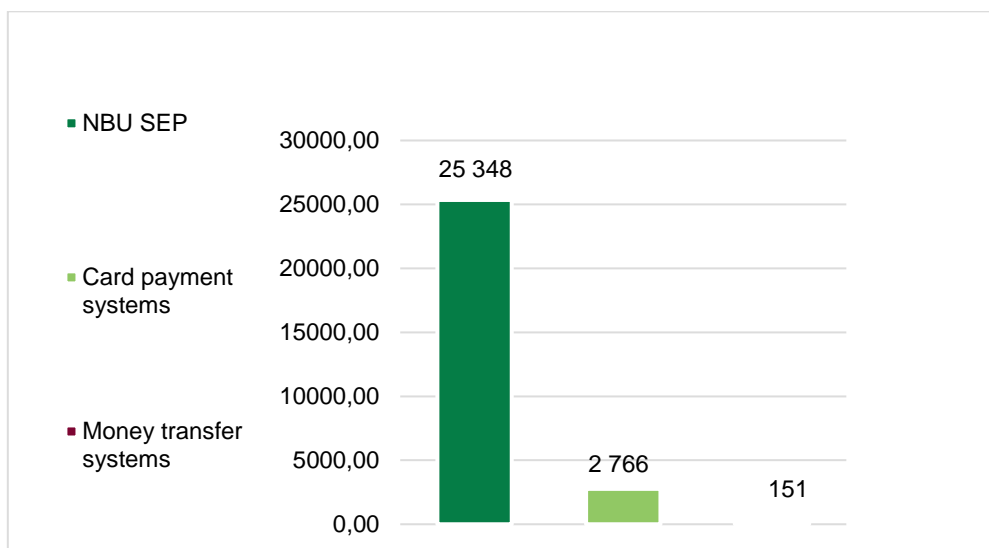
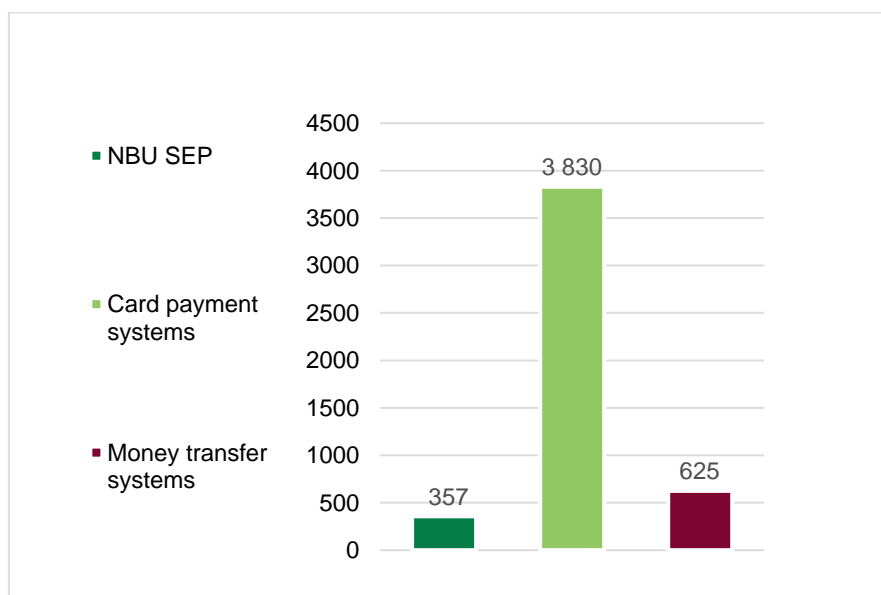


Figure 2. Number of payments and transfers within Ukraine in 2018, million



⁶On 22 June 2018, the NBU cancelled the registration of TYME payment system (FC OMP-2013 LLC).

⁷The number and value of cashless transactions carried out in the SEP exclude transactions in the bank's own network (On-U).

The number and value of transactions carried out via card payment systems include debit cashless and cash transactions (both interbank and On-U transactions).

Some types of transactions related to fund transfers in a card payment system (for example, daily clearing transactions) and in money transfer systems (for example, transfers to corporate payees) are also reported as SEP payments, which may cause a duplication of data.

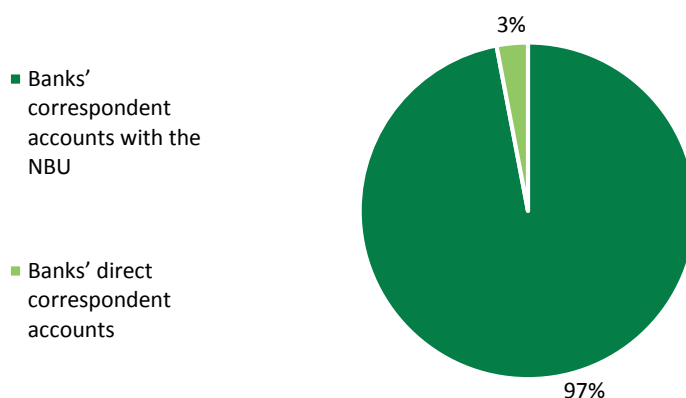
Analysis of performance indicators of the NBU's SEP

The SEP is an RTGS-type⁸ state-owned payment system that handles interbank money transfers in hryvnia through NBU correspondent accounts. The NBU is the operator and settlement bank for the SEP.

Currently, the SEP is Ukraine's sole systemically important state payment system. This is because it handles more than 97% of all hryvnia-denominated interbank transfers within Ukraine. All Ukrainian banks and their branches and the State Treasury Service of Ukraine and its regional boards are participants in the SEP. The SEP ensures interbank settlements within Ukraine both based on client orders and based on the obligations of banks and other participants of the system.

In 2018, the SEP processed 97% of all domestic currency interbank transfers within Ukraine. The remaining 3% were processed through correspondent accounts opened by banks with other banks. The SEP handled on average 1.4 million payments worth UAH 101 billion per day in 2018.

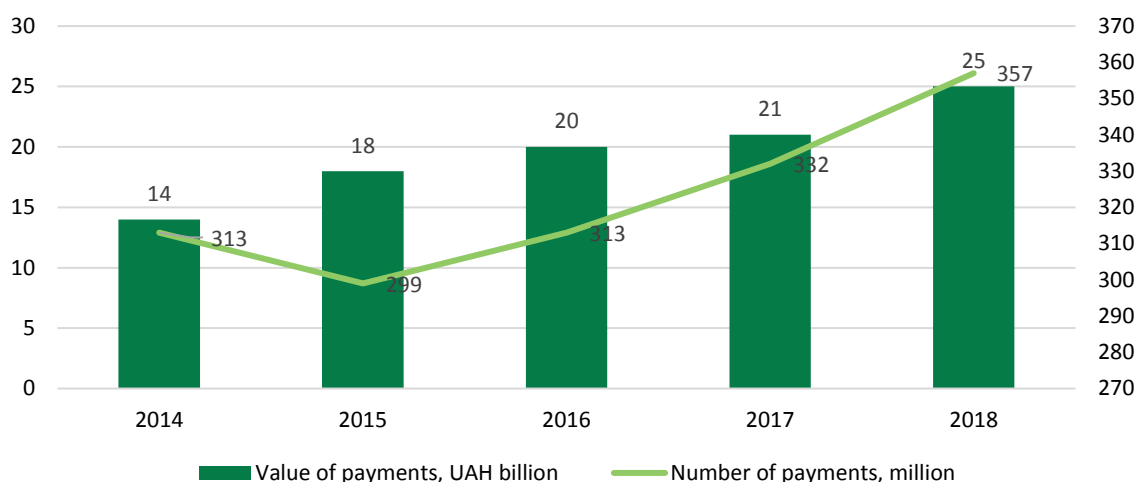
Figure 3. Total number of payments in Ukraine in 2018 on direct correspondent accounts of banks and correspondent accounts of banks with the NBU



In 2018, 357 million initial payments worth UAH 25 trillion were made through the SEP, an 8% increase in number and 19% in value compared to 2017.

Over the last 5 years, the number of interbank transfers through the SEP increased 14% and the value of those transactions grew 79%.

⁸ Real-time gross settlement systems.

Figure 4. SEP interbank transfers in hryvnia within Ukraine in 2014–2018

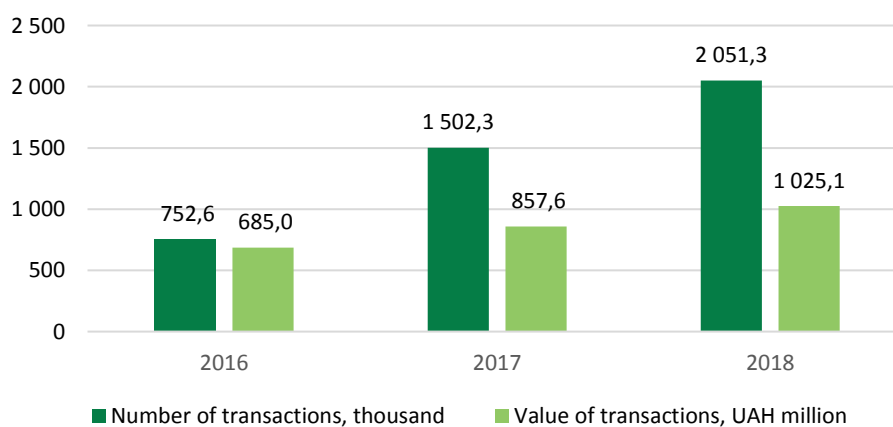
Analysis of performance indicators of the National Payment System Ukrainian Payment Area PROSTIR

In 2018, the NBU approved a development strategy for the National Payment System Ukrainian Payment Area (hereinafter referred to as “NPS PROSTIR”) out to 2022⁹. The document defines strategic goals and key development indicators for the payment system.

As at the end of 2018, 50 Ukrainian banks and the national postal service were participants in NPS PROSTIR. Twenty-five banks in the NPS PROSTIR provide acquirer services and issue payment cards.

As of 1 January 2019, 586,200 PROSTIR cards were in circulation, of which 459,400 cards are in active use. That corresponds to 78% of all cards, an increase of 11 pp yoy.

The number of interbank transactions processed by NPS PROSTIR increased 37% yoy in 2018 to 2.051 million and the value of those transactions increased 20% to UAH 1.025 billion.

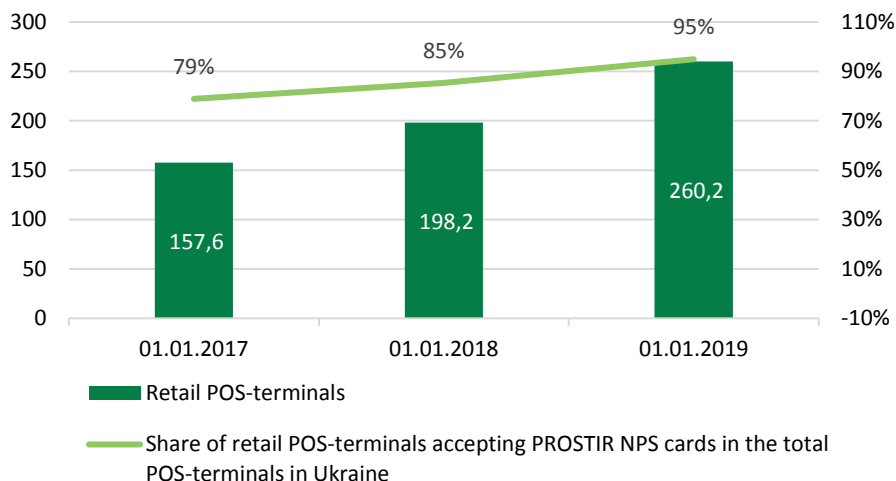
Figure 5. Interbank transactions using NPS PROSTIR payment cards

⁹ Approved by NBU Board Resolution No. 162 on 20 March 2018

Last year, NPS PROSTIR expanded its payment card acceptance infrastructure. As of 1 January 2019, 95% of all retail POS terminals in Ukraine accept NPS PROSTIR cards, a 10 pp increase from the start of 2018.

As of the start of 2019, NPS PROSTIR cards were accepted at 17,000 ATMs (85% of all ATMs in Ukraine), a 5 pp increase from the start of 2018.

Figure 6. Retail POS terminals servicing NPS PROSTIR cards (thousands)

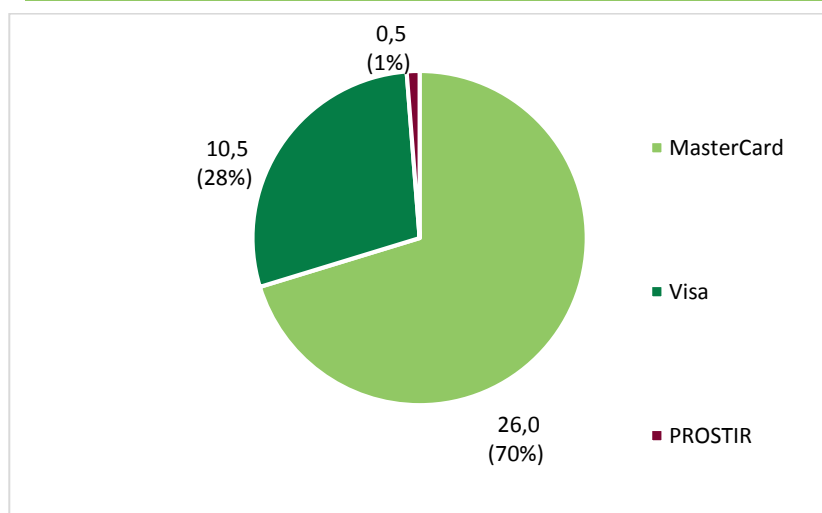


Key achievements by NPS PROSTIR in 2018:

- increased the payment infrastructure that accepts NPS PROSTIR cards to 95% of card processing infrastructure in Ukraine
- completed an agreement to issue co-badged PROSTIR–UnionPay cards
- introduced the ability to complete interbank transfers between PROSTIR cards and international payment system cards
- introduced additional verification for secure online settlements
- expanded the system's product range
- launched a PROSTIR NPS e-money project with a telecommunications company
- promoted the NPS PROSTIR brand and the system's services for payment cards holders.

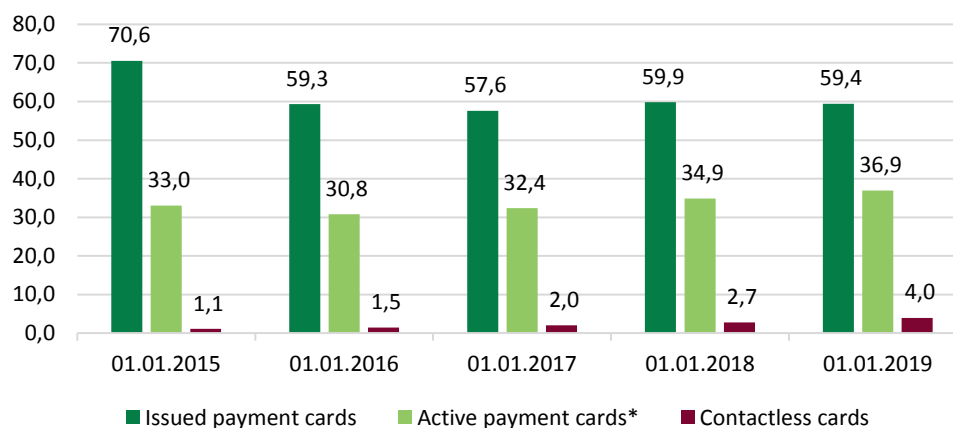
Analysis of performance indicators of card payment systems

MasterCard and Visa are the top card payment systems in Ukraine. PROSTIR NPS also operates in Ukraine. In 2018, the three accounted for almost 100% of all card-based payments in Ukraine.

Figure 7. Number of active payment card transactions, million

As of 1 January 2019, Ukrainian banks had issued 59.4 million payments cards, 62% of which are active (36.9 million)¹⁰.

From the start of 2018, the total number of active payment cards increased 6%. At the same time, the number of active contactless payment cards increased 44% from 2.7 million to 4.0 million.

Figure 8. Number of payment cards issued by Ukrainian banks, million

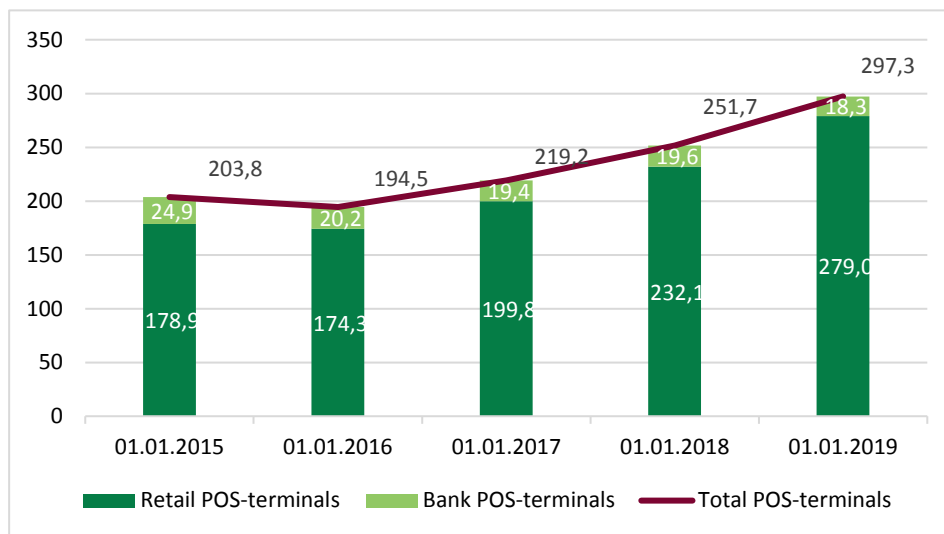
As of 1 January 2019, MasterCard had 26.0 million active cards, Visa had 10.5 million, and NPS PROSTIR had 0.5 million.

Ukraine's total network of POS terminals grew 18% yoy in 2018 to 297,300. That growth was driven by a 20% increase in retail POS terminals from 232,100 to 279,000. Meanwhile, the number of bank ATMs decreased 7% to 18,300.

At the same time, innovative services like Apple Pay and Google Pay are spurring growth in contactless payment infrastructure. As of 1 January 2019, 79.4% (207,300) of all POS terminals in Ukraine offer contactless payments.

¹⁰The total number of payment cards issued by banks with at least one debit transaction in the last three months.

Figure 9. Number of POS terminals (thousands)



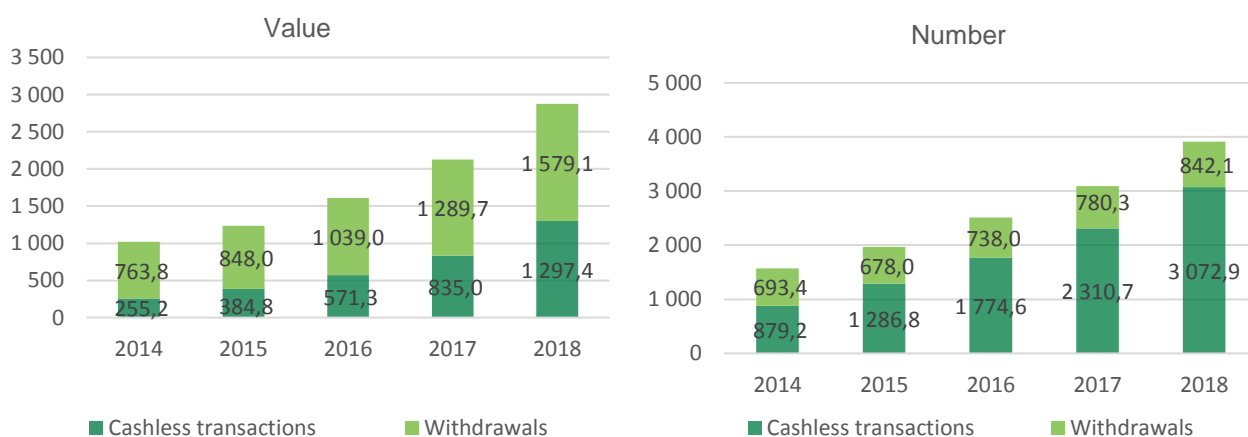
The number ATMs remained steady at approximately 20,000 throughout 2018. The number of self-service kiosks (SSK) decreased by 3% over the course of the year to 16,600.

The number of businesses in the trade and services sectors that accept card transactions increased 20% (by almost 35,000 from early 2018) to 208,661.

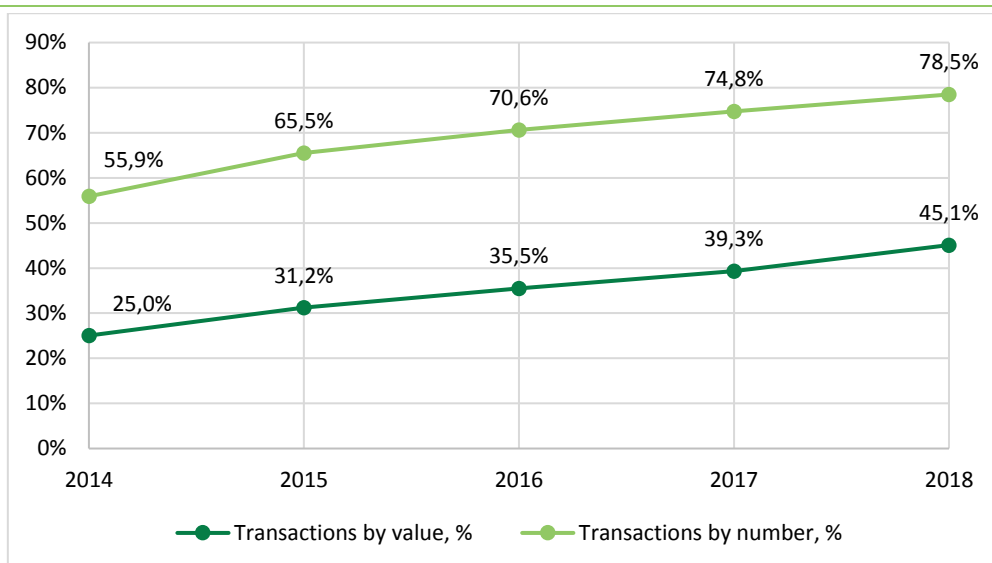
In 2018, the total value of transactions on payment cards issued by Ukrainian banks grew 35% yoy to UAH 2,876.5 billion and the total number of transactions increased 27% to 3,915.0 million.

The value of cashless transactions increased 55% to UAH 1,297.4 billion and the number of transactions increased 33% to 3,072.9 million.

Figure 10. Value and number of payment card transactions



In 2018, the share of cashless transactions increased to 45.1%, a 5.8 pp increase yoy. Compared to 2017 (when this share stood at 39.3%), this is a 5.8 pp increase.

Figure 11. Cashless transactions as a share of the total value/number of payment card transactions in 2014–2018

Analysis of performance indicators of money transfer systems

In 2018, both residents and nonresidents used money transfer systems to transact the following transfers:

- domestic transfers of UAH 150.5 billion (USD 5.5 billion)
- into Ukraine – USD 2.301 billion (converted to USD)
- abroad – USD 294 million (converted to USD).

Money transfer systems operated by residents handled USD 5.5 billion in transactions (99.97% of all domestic money transfers). Western Union was the only system operated by a nonresident to handle domestic money transfers. Western Union handled USD 1.6 million in domestic transfers, or 0.03% of total domestic money transfers.

In 2018, cross-border transfers were predominantly transacted through systems operated by nonresidents. The total value of transfers through these systems amounted to:

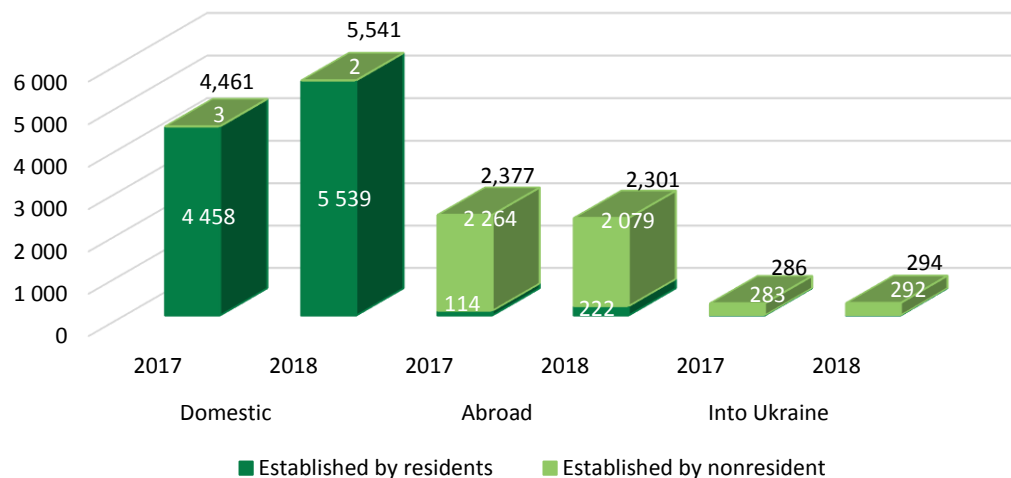
- into Ukraine – USD 2.079 billion (converted to USD), or 90.36% of all transfers into Ukraine
- abroad – USD 292 million (converted to USD), or 99.23% of all domestic transfers.

In 2018, three money transfer systems operated by residents transacted cross-border transfers. The value of transfers through these systems amounted to:

- into Ukraine – USD 222 million (converted to USD), or 9.64% of all transfers into Ukraine
- abroad – USD 2 million (converted to USD), or 0.77% of all domestic transfers.

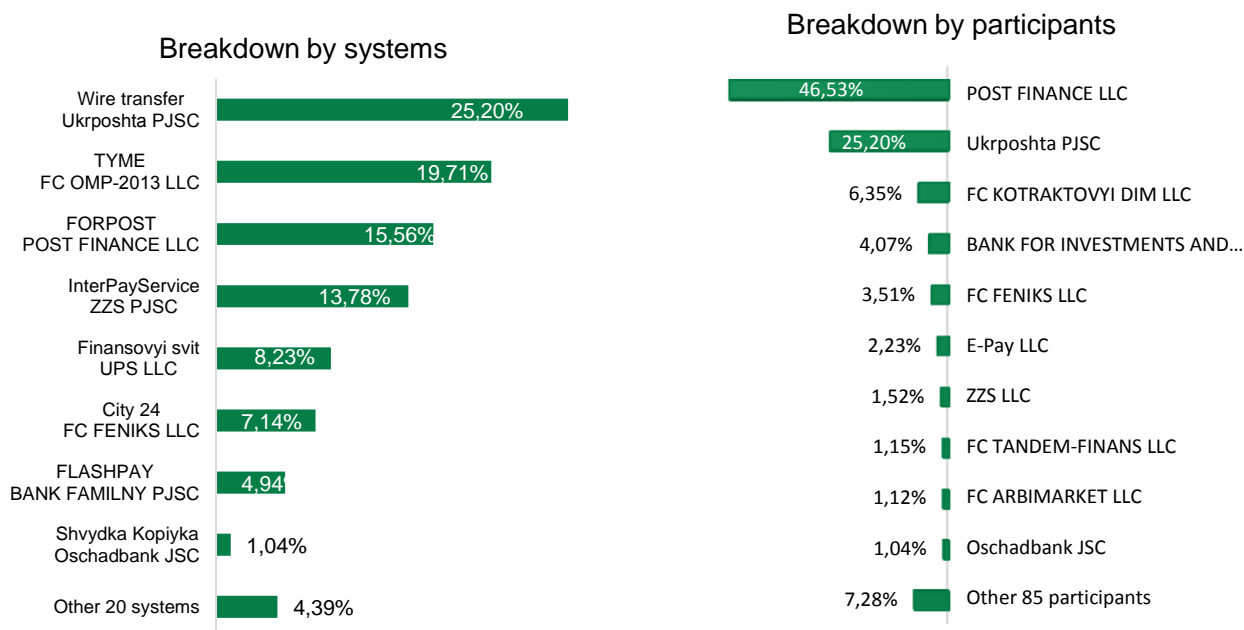
The overall landscape in 2018 was similar to 2017.

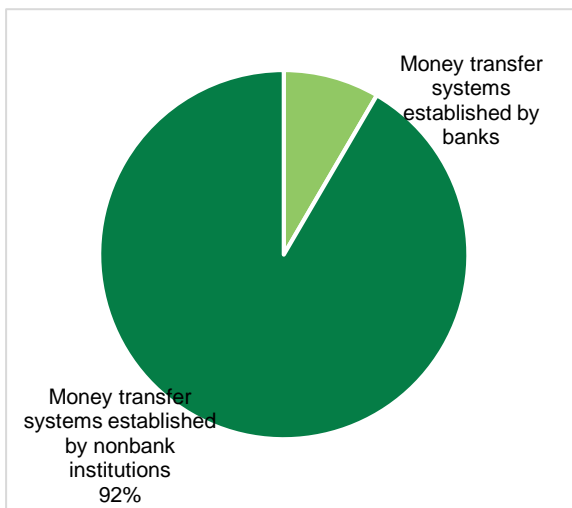
Figure 12. Transfers through systems operated by residents and nonresidents, USD million (converted to USD)



Poshtovyi perekaz transfer system (operated by Ukrposhta PJSC) handled the most domestic funds (USD 1.4 billion or 25.2%). At the same time, POST FINANCE LLC (a participant of FORPOST, InterPayService, and TYME payment systems) handled USD 2.6 billion or 46.5% of all domestic transfers.

Figure 13. Breakdown of transfers in money transfer systems operated by residents in Ukraine, %



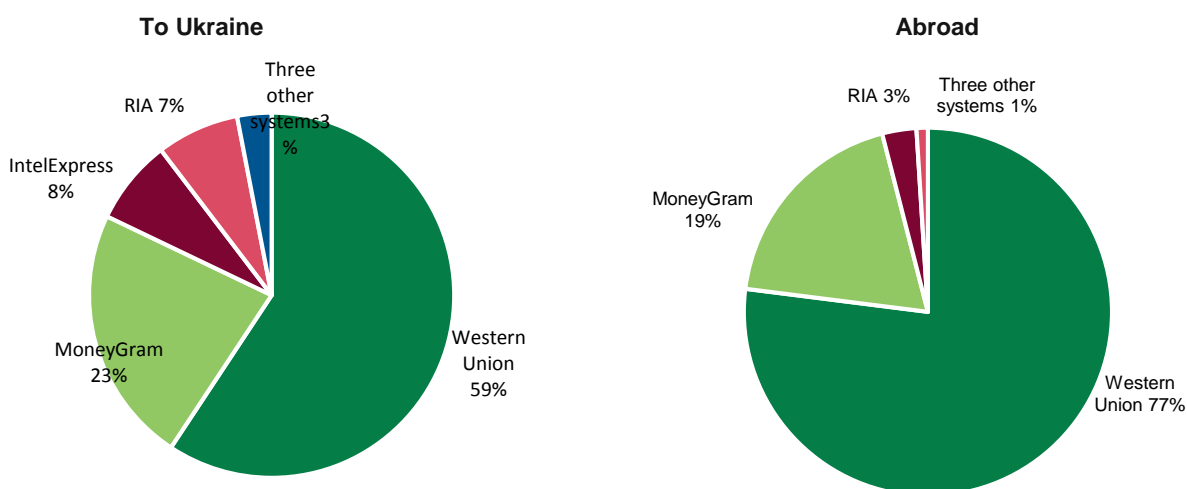


Most transfers (92%) conducted through money transfer systems operated by residents were handled by systems operated by nonbank financial institutions. Only 8% were executed through systems operated by banks.

In 2018, the following money transfer systems operated by nonresidents operated in Ukraine: three from the US (Western Union, MoneyGram, and RIA) and one each from Georgia (IntelExpress), the UK (Sigie Money Transfer), Canada (MEEST), and Azerbaijan (HAZRI).

Western Union accounted for the greatest volume of funds both into Ukraine and abroad (59% and 77% of transfers through systems operated by nonresidents into Ukraine and abroad, respectively).

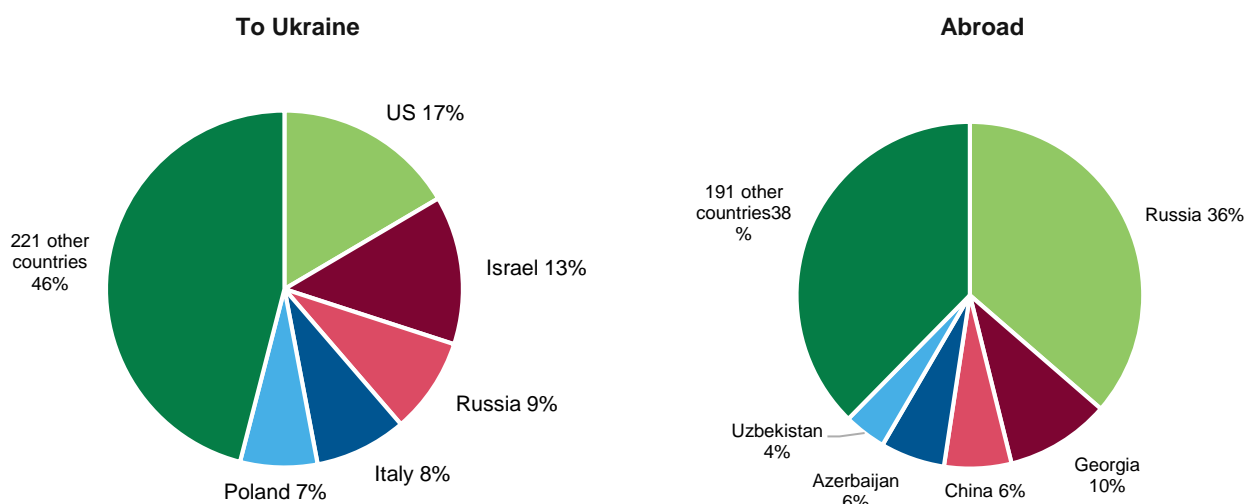
Figure 14. Breakdown of cross-border transfers by nonresident transfer systems



Ukraine remains a net recipient of cross-border transfers. In 2018, the amount received in Ukraine through international money transfer systems was eight times higher than that sent abroad.

The majority of transfers to Ukraine were from the US (17%), Israel (13%), and the Russian Federation (9%). Most transfers from Ukraine were to the Russian Federation (36%), Georgia (10%), and China (6%).

Figure 15. Breakdown of cross-border transfers by countries



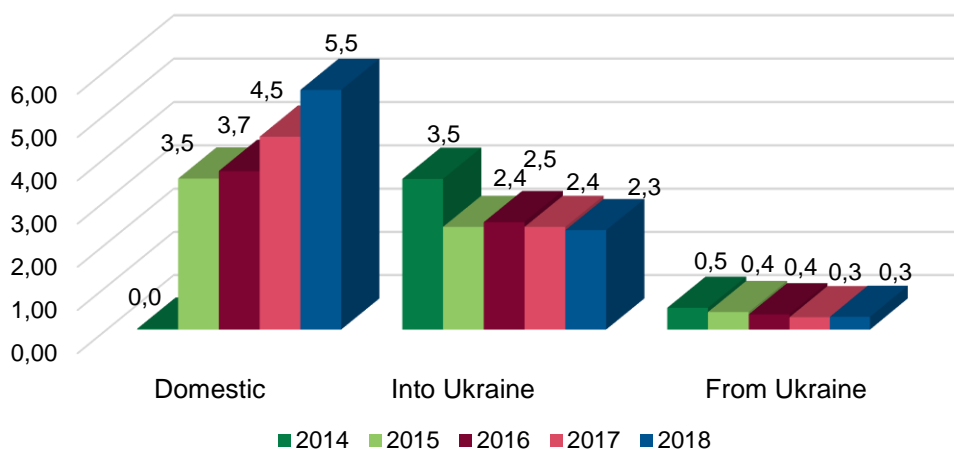
Below are a few notable takeaways from the performance of money transfer systems over the last five years (2014–2018):

domestic transfers grew substantially in 2015 compared with 2014. In that year, operators of money transfer systems operated by nonbank financial institutions began reporting statistics on domestic money transfers. Domestic money transfers continued to increase in 2016–2018 on the back of newly operated money transfer systems and an increase in the number of participants in those systems

transfers into Ukraine decreased by USD 1.1 billion yoy (converted to USD) in 2015. Transfers into Ukraine remained fairly steady afterwards in 2016–2018

transfers abroad decreased from USD 0.5 billion (converted to USD) in 2014 to USD 0.3 billion in 2017–2018.

Figure 16. Transfers through money transfer systems, USD million (converted to USD)



3. Assessment of the compliance of payment systems with the PFMI

3.1 Objectives of the assessment of payment systems

The assessment aims to improve the operation of payment systems in Ukraine with the goal of adhering to the PFMI and to prevent, detect, and rectify violations in the operations of payment systems by means of regular checks of compliance with legal requirements.

The NBU performs the following types of assessments of payment systems:

- assessment of a payment system that intends to operate in Ukraine¹¹
- comprehensive assessment of an important payment system
- targeted assessment (assessment of individual aspects of payment system operations).

Based on the findings of the comprehensive and targeted assessments, the NBU drafts recommendations to the payment system operator on improving operations to align with the PFMI.

Significant payment systems are assessed in accordance with Resolution No. 755, using the methodology for the comprehensive assessment of systemically important payment systems that was approved by NBU Board Resolution No. 635 on 24 September 2015.

The NBU applies 18 of the 24 principles established by PFMI.

To be consistent, the NBU applies the PFMI and requirements to all important payment systems in Ukraine, including those operated by the NBU. The first payment system ever assessed in 2015 by the NBU for its compliance with PFMI was the NBU SEP as the only systemically important payment system in Ukraine. In 2019, the NBU intends to conduct targeted assessments of individual operational aspects of the NBU SEP.

3.2 Assessment of Payment Systems in 2018

In 2018, the NBU conducted a targeted assessment of national payment system Finansovyi Svit (Ukrainska platizhna systema LLC as the payment system operator). From 2015 to 2018, the payment system was categorized as important.

The assessment aimed to check compliance in operational risk management and business continuity with Ukrainian law and PFMI principle 17 (operational risk).

The scope of that assessment was selected based on the NBU's enhanced requirements on the business continuity of payment systems introduced in line with amendments to Resolution No. 755 (approved by NBU Board Resolution No. 61 on 7 June 2018).

Based on the findings of the assessment, the NBU drafted and issued recommendations to Ukrainska Platizhna Systema LLC to improve the business continuity of Finansovyi Svit NPS.

¹¹ The NBU assesses a payment system that plans to operate in Ukraine by examining the documents submitted by the payment system operator for compliance with NBU regulation on registering payment systems, payment system participants, and the payment service providers.

4. Conclusions

4.1 The NBU's international cooperation on oversight

Cooperative oversight

One of the central bank's oversight duties is to cooperate with other national and international authorities to improve the operational security and effectiveness of payment systems. The NBU's authority to work with central state authorities, the central banks of other countries, and international organizations is prescribed by law.

Cooperative oversight is mandatory for all central banks as per the PFMI. From Section 4 of the PFMI principles: Scope of the responsibilities of central banks, market regulators, and other relevant authorities for financial market infrastructures prescribes cooperation between central banks, market regulators and other competent authorities both domestically and internationally to ensure stable and effective operation of financial market infrastructures.

Currently, the National Bank of Belgium and the NBU conduct cooperative oversight in Ukraine (based on a memorandum) over the MasterCard payment system, which handles about 70% of all cashless card operations in Ukraine.

In line with Article 22 of the Statute of the European System of Central Banks and of the European Central Bank, the National Bank of Belgium carries the main liability for the operation of MasterCard Europe in the euro area, since MasterCard Europe is based in Waterloo, Belgium and is governed by Belgian law.

Cooperative oversight of international payment systems is a best practice of the central banks of developed economies.

In 2018, representatives from the Payment Systems and Innovations Department of the NBU held a virtual meeting with representatives from the National Bank of Belgium to discuss the findings of the latter's comprehensive assessment of MasterCard Europe.

A promising area in terms of cooperative oversight for the NBU is the oversight of the Visa card payment system (a socially important payment system in Ukraine) and participation in cooperative oversight of the SWIFT global provider of secure financial messaging services with the National Bank of Belgium. The National Bank of Belgium carries the main liability of the oversight of SWIFT, with other central banks also playing a role in the cooperative oversight of SWIFT.

International learnings

Experts from the IMF and World Bank missions became international donors of payment infrastructure oversight in 2018.

The IMF mission drafted an action plan based on recommendations to enhance and expand the oversight function.

World Bank experts held workshops with the NBU on PFMI.

In 2018, an exchange of experience on oversight took place between the NBU and representatives from the Central Bank of the Republic of Turkey.

4.2 Development prospects for oversight in Ukraine

The NBU is constantly working to harmonize Ukrainian laws with international payment oversight practices to implement international best practices in payment security and the protection of the rights of financial services consumers.

In 2018, the NBU continued to convert to a risk-based approach to oversight based on global best practices.

In the future, the oversight function will expand to cover other financial market infrastructures and payment instruments. Those initiatives all need legislative support.

In order to introduce international approaches to **monitoring systemically important payment systems**, the NBU in 2019 will focus on developing monitoring of the NBU SEP as the only systemically important payment system in Ukraine.

In line with the PFMI, in the course of oversight the regulator will focus on systemically important financial market infrastructure, especially business continuity and incident management.

The World Bank mission that visited Ukraine in April 2018 noted that the reports that are provided on incidents at systemically important payment systems, the management of those incidents, and the development of mechanisms for the business continuity of systems are an integral part of monitoring as part of oversight and the duty of the central bank as the market regulator.

Stock market infrastructures as overseen entities

In 2018, the NBU submitted formal motions regarding the oversight of the CSD and the CCP at a meeting of the Committee on Financial Policy and Banking of the Verkhovna Rada of Ukraine during a hearing of the Draft Law of Ukraine *On Amendments to Certain Laws of Ukraine on the Settlement Center on Servicing Contracts in Financial Markets*. Those motions were based on best global practices and initiated based on recommendations by the IMF technical support mission that visited Ukraine by invitation of the NBU in June 2018.

These motions seek to grant the NBU the authority to oversee the infrastructural elements of the stock market that are critical to ensuring the country's financial stability.

Bringing the operations of the National Depository of Ukraine in line with the PFMI lays the groundwork to establish a single, standard central depository. Under the proposed law, the NBU would be authorized to explore plans to transfer government securities from the NBU's depository to be serviced by the National Depository of Ukraine as the central depository. That would improve the performance of Ukraine's depository system, since two depositories are unnecessary given the current stock market trading volume. The presence of two depositories complicates operations for stock market participants.

Global trends in oversight

According to a World Bank survey¹², over 90% of all central banks oversee payment systems. The rapid development of payment systems changes the goals of oversight and of the entities subject to oversight.

According to the World Bank, central banks are tending to expand their authorities and duties. Today, in Ukraine oversight covers payment systems, most central banks oversee besides payment systems other financial market infrastructures, securities settlement systems, central securities depositories, central counterparties, trade repositories, as well as payment instruments and payment services.

According to the World Bank, 60% of central banks were primary overseers for central securities depositories that keeping records and storing government securities, and 36% (51% of upper-middle income countries)– oversee corporate securities, 60%– – trade repositories, and 30%– – central counterparties¹³.

The World Bank also reported an increase in the list of payment systems overseen by central banks. First, oversight extends to all types of payment systems, regardless of whether they were operated by the central bank or by other institutions. Second, save for systemically important payment systems, retail payment systems, payment services and instruments are being subject to oversight. At present, 92% of central banks oversee systemically important payment systems–, 89% – retail payment systems and only 13% central banks limit the oversight scope to national payment systems.

Most central banks in the course of oversight prefer “soft” instruments, such as monitoring payment systems (85% of central banks), assessments using the PFMI (72%), dialogue and moral suasion (65%), and publishing statistical and other reports on oversight (49%). At the same time, according to the World Bank's findings released in 2018¹², central banks are tending to shift towards “tougher” oversight instruments. This can be attributed to payment systems becoming an integral part of the economy and the banking sector and efficiency and sustainability of the same plays a great role in a stable and successful performance of the financial system as a whole. The World Bank reports that 35% of central banks actively conduct on-site oversight inspection (in 2012 this indicator was 28%) and 21%– impose corrective measures (14% in 2012), 60%– are legally empowered to regulate oversight (54% in 2012).

¹² Findings of a survey of the operations of 110 central banks in 2015. Source: Payment Systems Worldwide a Snapshot Summary Outcomes of the Fourth Global Payment Systems Survey, World Bank. – 2018. <http://pubdocs.worldbank.org/en/591241545960780368/GPSS-4-Report-Final.pdf>.

¹³ The central counterparty operates in 40% and trade repository in 20% of 110 economies surveyed by the World Bank.

At present, central banks are focused on managing cyber risk and risks associated with fraud in payment systems using data transmission channels¹⁴ regulated by special documents drafted by the Committee on Payments and Market Infrastructures, the Bank for International Settlements, and the International Organization of Securities Commissions¹⁵ that supplement the PFMI.

Furthermore, in the context of the globalization of financial markets, the role of cooperation and coordination becomes more prominent with both national overseers, as well as international cooperation on oversight, which nearly 80% of central banks perform.

¹⁴ Reducing the risk of wholesale payments fraud related to endpoint security, BIS. – 2018. <https://www.bis.org/cpmi/publ/d170.pdf>.

¹⁵ Guidance on cyber resilience for financial market infrastructures, CPMI-IOSCO. – 2016. <https://www.bis.org/cpmi/publ/d146.pdf>.

Terms and Abbreviations

NPS – national payment system

Law of Ukraine on Payment Systems stands for the Law of Ukraine *On Payment Systems and Money Transfer in Ukraine*.

IPS stands for international payment system

NBU stands for the National Bank of Ukraine

Payment systems stands for payment and settlement system

Regulation No. 755 stands for Regulation *On the Oversight of Payment Systems and Settlement Systems in Ukraine* approved by NBU Board Resolution No. 755 dated 28 November 2014

PROSTIR (full name National Payment System Ukrainian Payment Area Prostim) stands for multiple-issuer national payment system with the National Bank of Ukraine as the payment system operator that transfers funds and transacts other operations using payment instruments.

Register stands for the Register of Payment Systems, Settlement Systems, Participants, and Payment Service Providers.

NBU SEP stands for the System of Electronic Payments of the National Bank of Ukraine

CSD stands for the Central Securities Depository

CCP stands for the Central Counterparty

PFMI stands for Principles for Financial Market Infrastructures drafted by the Committee on Payments and Market Infrastructures, the Bank for International Settlements, and the International Organization of Securities Commissions

RTGS – real-time gross settlement systems according to international classification.