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## NEOBANKING REGULATION

A set of recommendations for regulating the activities of Ukrainian neobanks has been formulated, embodying a balanced approach, promoting European integration, while ensuring compliance with requirements and supporting their competitiveness. The aim of the article is to extrapolate valuable foreign insights for developing recommendations on constructing regulatory and legal framework that will contribute to the inclusion of Ukrainian neobanks into the EU's financial space. The research is based on the hypothesis that the existing regulatory gap in the organization and supervision of neobanking in the EU and Ukraine prevents Ukrainian neobanks from fully realizing their innovative and competitive potential. The research aim was accomplished thanks to the application of a wide range of general scientific and specialized methods, in particular a comprehensive review of scientific sources, legal, comparative, statistical performance analysis, case study, grouping and systematization, as well as formulation of neobanks regulation policy content. The relevance of improving the regulation system of neobanks has been proven, taking into account the acceleration of the global

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## РЕГУЛЮВАННЯ НЕОБАНКІНГУ

Сформульовано комплекс рекомендацій щодо регулювання діяльності українських необанків, що втілюють збалансований підхід, сприяючи європейській інтеграції, водночас забезпечуючи дотримання вимог і підтримку конкурентоспроможності необанків. Метою статmi  $\epsilon$  екстраполяція цінного іноземного досвіду для розроблення рекомендацій щодо побудови нормативно-правової бази, яка сприятиме включенню українських необанків у європейський фінансовий простір. В основу дослідження покладено гіпотезу, що наявна нормативна прогалина в організації та нагляді за діяльністю необанків в ЄС та Україні заважає українським необанкам повною мірою реалізувати свій інноваційний і конкурентоспроможний потенціал. Дослідницька мета досягнута завдяки застосуванню широкого спектра загальнонаукових і спеціалізованих методів, зокрема комплексного огляду наукових джерел, правового, порівняльного, статистичного аналізу продуктивності, кейс-стаді, групування та систематизації, а також формулювання засад політики регулювання необанків. Доведено актуальність вдосконалення системи регулювання необанків



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expansion of neobanks as an alternative to the traditional banking business. The article reveals development trends and reasons for the growing popularity of neobanks in certain countries, as well as successful regulatory initiatives that can be adapted for implementation in Ukraine in order to overcome the challenges and threats that Ukrainian neobanks are currently facing. A particular emphasis is placed on the study of the regulatory system of neobanks in the EU countries, which is based on the principles of financial stability, consumer protection, and prevention of financial crimes. On the basis of a comparative analysis of different approaches, successful initiatives for implementation in Ukraine have been determined, which will make it possible to adapt the regulatory infrastructure of the neobanking sector to the level of best practices. Such adaptation is necessary, since the imperfection of the current regulatory and legal framework makes it impossible to comprehensively analyze and effectively control the neobanks' activities, which causes risk of uncertainty, unreliability of services, threats to security and compliance with international regulatory and legal requirements. This diminishes trust on the part of clients and investors, thereby hindering their international competitiveness. To ensure the sustainable development of neobanks in Ukraine, a roadmap for the step-by-step formation of the regulatory infrastructure of the neobanking sector has been developed.

Keywords: alternative banking, compliance, neobank, regulatory framework, regulation, regulatory gap, fintech, digitization.

JEL Classification: G21, G28, O16, O38, O43.

з огляду на прискорення їхньої глобальної експансії, що  $\epsilon$  альтернативою традиційному банківському бізнесу. Розглянуто тенденції розвитку та причини зростання популярності необанкінгу в окремих країнах, а також успішні регуляторні ініціативи, які можуть бути адаптовані для реалізації в Україні з метою подолання викликів і загроз, з якими наразі стикаються українські необанки. Акиентовано на дослідженні системи регулювання необанків у країнах ЄС, що грунтується на принципах фінансової стабільності, захисту споживачів і запобігання фінансовим злочинам. На основі порівняльного аналізу різних підходів визначено успішні ініціативи для впровадження в Україні, що дасть змогу адаптувати регуляторну інфраструктуру необанківського сектору до рівня найкращих практик. Така адаптація  $\epsilon$ необхідною, оскільки недосконалість чинної нормативно-правової бази унеможливлює комплексний аналіз та ефективний контроль за діяльністю необанків, що спричиняє ризики невизначеності, ненадійності послуг, загрози безпеці та відповідності міжнародним нормативно-правовим вимогам. Це знижує довіру з боку клієнтів та інвесторів, перешкоджає їх міжнародній конкурентоспроможності. З метою забезпечення стійкого розвитку необанків в Україні розроблено дорожню карту поетапного формування регуляторної інфраструктури необанківського сектору.

*Ключові слова:* альтернативне банківництво, комплаєнс, необанк, нормативно-правова база, регулювання, регулятивна прогалина, фінтех, цифровізація.

## Introduction

Digital or alternative banking, have gained significant prominence in recent years, disrupting traditional banking models. The growth of neobanks has been fueled by technological advancements and changing consumer preferences for digital financial services. Alternative banking all over the world stimulates economic development by fostering innovation, improving access to financial services, and attracting investment. This is of particular importance for countries like Ukraine as they seek to strengthen their financial sectors.

Presently, the regulatory framework for neobanks remains unsettled. Scholars and practitioners highlight varying challenges encountered by neobanks, emphasizing the need for the incorporation of a range of elements, methods, and approaches into the regulatory system.

According to the Bank for International Settlements (Bank for International Settlements, 2021, 13 July), regulators need to balance the

innovation and efficiency brought by new entrants with the potential challenges for oversight, enforcement and consumer protection.

The scientific works of domestic and international scientists are devoted to the development trends of Ukrainian and foreign neo-banks. In particular, scientists Irshak and Tvorydlo (2022) investigated the issue of the functioning mechanism of neobanks and certain features of neobanks licensing based on the license obtained from the parent bank.

Scientists Teslyuk et al. (2021) considered the legislative regulation mechanism of the neobanks activity in Ukraine, and summarized the peculiarities of the activities and development trends of the largest European neobanks.

The scientists Fedina and Bogrinovtseva (2022) focused their research on the neobanks development models, which are evident in foreign practice, and the analysis of their product and technological specifics.

Scientists Lobozinska et al. (2021) have revealed the specifics of the neobanks activities in the minds of the digital transformation of the financial market, and identified the prospects for a responsive eco-system to develop neobanks in Ukraine.

Unlike previous studies, the insights and recommendations presented in this article provide an achievable roadmap for policymakers, financial institutions, and entrepreneurs in Ukraine. They collectively aim to establish a regulatory environment that fosters growth, encourages innovation, and, most importantly, ensures the successful participation of Ukrainian neobanks in the ever-evolving European financial landscape.

The aim of the article is to extrapolate valuable foreign insights for developing recommendations on constructing regulatory framework that facilitates the inclusion of Ukrainian neobanks into the European financial space.

The tasks of the article are:

- to explore foreign experiences in regulating neobank activities and identify the most promising initiatives for implementation in Ukraine;
- to identify the challenges and obstacles faced by Ukrainian neobanks because of the imperfect regulatory framework;
- to develop a comprehensive regulatory framework proposal that aims for European integration and addresses the specific needs and goals of Ukrainian neobanks.

The research hypothesis is the statement that the existing regulatory gap in the organization and supervision of neobank activities in the European Union and Ukraine prevents Ukrainian neobanks from fully realizing their competitive potential and seamlessly integrating into the European financial space. The investigation of foreign neobank regulatory experiences makes it possible to uncover valuable patterns for regulatory adaptation. Addressing the inadequacies in the current Ukrainian regulatory environment, and formulating a comprehensive regulatory framework that aligns with European standards while catering to the specific needs of Ukrainian

neobanks, will lead to an environment conducive to innovation, sustained growth, and increased competitiveness in the Ukrainian neobanking sector.

The research aim was accomplished through the implementation of a comprehensive array of general scientific and specialized methods. Comprehensive literature review of academic papers, reports, and relevant literature on neobanking and banking regulatory frameworks was conducted to understand the current state of neobank regulation and integration in the European Union and Ukraine. Legal analysis was employed to examine the existing legal documents, statutes, and regulatory frameworks governing neobanks in Ukraine and the EU. This aimed to identify legal barriers, inconsistencies, and areas that require alignment with European standards. Comparative analysis was undertaken to collate the existing regulatory environment of neobanks in European countries with the regulatory conditions in Ukraine. This analysis aimed to identify regulatory similarities, differences, gaps, and patterns. Statistical and performance analysis was conducted to identify and interpret trends in the development of national and multinational neobanking markets. The goal was to explore the effectiveness of neobanks' activities and define potential areas for improvement through regulatory measures. Case studies were employed to investigate successful regulatory experiences in other countries. This involved examining the challenges they faced and the strategies implemented, aiming to derive valuable insights for adapting regulations in Ukraine. Grouping and systematization were applied to spot the key elements of neobank regulation and unite them into a comprehensive framework. Policy formulation was carried out to develop a comprehensive regulatory framework aligned with the specific needs of Ukrainian neobanks while also conforming to EU standards.

The main part of the article comprises four sections structured as follows: the first delves into the evolution and global rise of neobanks, the second highlights innovative regulatory approaches worldwide and their impact on neobank development, the third focuses on the regulatory landscape within the European Union, and the final section explores opportunities for Ukraine to adopt successful regulatory practices and outlines a roadmap for the phased formation of its neobanking regulatory infrastructure.

## 1. Exploration of neobank development in Europe and globally

At the beginning of the 20th century, traditional banks dominated the financial services sector. Initially, the services offered by banks included deposit-taking, lending, and capital management services. In the latter half of the 20th century, traditional banking underwent shifts towards consolidation, but most significantly, substantial deregulation. This led to the emergence of large transnational banks, which later in the 21st century swiftly adopted technology to enhance efficiency and expand operations. However, despite significant

digitization influencing the structure of banks, many still heavily rely on physical presence and personal interaction as part of their offerings to clients.

The worldwide expansion of neobanks experienced a notable acceleration due to the COVID-19 pandemic, prompting a global adjustment to a new reality. Consequently, consumers were compelled to embrace online services, including banking. The internet has seamlessly integrated into our daily lives, social networks have gained extensive popularity, and technological companies are providing innovative products and services with elevated standards of quality, speed, and convenience for consumers, all made possible through digital solutions.

Additionally, the surge in labor migration has led to an increase in international money transfers. Small and medium-sized businesses began seeking alternative financing methods, while private investors explored new opportunities for earnings. All these factors contributed to the emergence of new technological solutions in the banking sector and generated a strong demand for digital services, driving the development of virtual banks (neobanks) as significant players in both global and national markets, including Ukraine. Neobanks, which exclusively provide digital financial services, should be appropriately regarded as an alternative to traditional banks.

The global market for neobanking services is steadily expanding, currently estimated at USD 66.82 billion, compared to USD 34.77 billion in 2020. According to forecasts from Grand View Research, it is anticipated that the scale of neobanking services will grow by 53.4%, surpassing USD 2 billion by the year 2025 (24 Neobank Statistics to Help with Risk and Compliance, 2022, 30 June).

Certainly, neobanking is a global phenomenon that covers various segments and banking models in key markets across the globe. The most popular neobanks are mainly concentrated in Europe, with countries such as the United Kingdom, France, Finland, and Germany taking the lead in the domains of mobile connectivity and enhanced user experience (*Figure 1*).

Presently, there is a growing trend of people relying exclusively on digital banks. In the United States, as of January 1, 2023, the percentage of users exclusively using digital banks constituted 13.7% of the total population, and projections indicate that this figure is expected to reach 20% by the year 2025 (*Figure 2*).

Europe holds the largest market share in neobanking, contributing to over 30% of the global revenue. This is credited to the emergence of numerous technological startups and the growing acceptance and integration of advanced technologies within the financial sector. The growing implementation of internet services and the widespread use of smartphones are expected to accelerate the expansion of services provided by neobanks (Europe neobanking market, 2023).

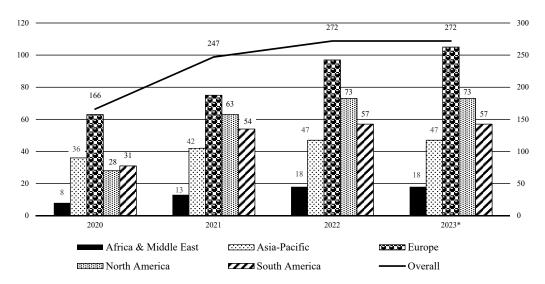


Figure 1. Number of neobanks in the regional breakdown for 2020–2023, as of January 01, pcs.

\*2023–2025 – projected figures.

Source: The list of neobanks and digital banks in the world (2023, 1 September).

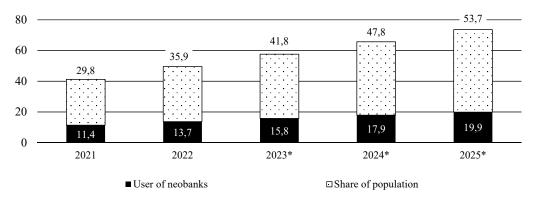


Figure 2. Neobank users in the US in 2021–2025\*

\*2023 – projected figures.

Source: (Spiridonova, 2023).

During the COVID-19 pandemic in 2020, Germany had the highest number of users in the digital commerce sector. The average transaction value of digital commerce per user was USD 2 084, which was the second-highest level globally after the United States. People with higher and medium income levels showed a preference for neobanks, especially considering the limitations imposed during the pandemic for offline transactions (Europe neobanking market, 2023).

It is anticipated that the European neobanking sector will grow by 19.53% between 2023 and 2027, reaching a market volume of USD 4.66 trillion by 2027. As of May 2023, there are ninety-eight online banks in Europe, among which N26, Wise, Revolut, Bunq, and Monzo are some of the most popular (Best European Neobanks in 2023, 2023).

Neobanks contribute to the increased accessibility of banking services, evident in the rising number of online bank accounts being opened. Consumers benefit from the convenience of digital technologies. For example, in Europe, the registration process with a neobank can be completed from any location with a reliable Wi-Fi connection. Customers typically need to prepare identification documents, proof of residence, and confirmation of employment or enrollment. In 2022, the customer base of the largest European neobanks reached approximately 34.6 million people.

In the Statista Market Insights report for 2023, the user adoption rate is forecasted to be 15.5%, and over the next five years, it is expected to grow to 22.8%. As of the third quarter of 2023, Brazil, India, and Ireland are global leaders in the number of individuals holding accounts with neobanks (*Table 1*).

Table 1
Anticipated metrics for the neobanking adoption across countries during 2023–2027\*

Country	Number of people with a neobank account (2027)	% of people with a neobank account (2027)	Increase from 2023
Philippines	39788800	32	161
Mexico	54144600	41	148
Portugal	3349500	33	133
United Arab Emirates	4022100	41	122
Malaysia	10001600	28	122
South Africa	19505200	31	115
United States	52065000	15	91
Spain	14663000	31	82
India	685400000	46	84
Germany	19934400	24	71

<sup>\*</sup>The above values are predictive.

Source: (Kadar, 2023).

In Brazil, about 43% of the population have neobanking accounts. The most popular neobank is NuBank, boasting over 48 million users and holding the second-largest capital investment of USD 4.1 billion since its launch in 2012. It is surpassed only by the American neobank Robinhood, which attracted USD 6.2 billion in capital investments since its inception in the same year (Kadar, 2023).

In India, about 26% of the population use neobanking accounts, while in Ireland, this figure is 22%. According to forecasts, the number of neobank users is expected to increase each year. In 2023, approximately 13% of the

population in the Philippines used neobanks, but Finder predicts that by 2027, this figure will rise to around 32% (approximately 39.8 million people) – a 161% increase compared to 2023.

By the year 2027, an estimated 54.1 million residents in Mexico, constituting 41% of its population, will be utilizing neobanking. This reflects a substantial 148% increase compared to the situation in 2023 when only 17% of the population exclusively held digital banking accounts.

Approximately 14% of the population in Portugal used neobanking in 2023, and according to forecasts, this figure is expected to increase to around 33% by 2027, equivalent to 3.35 million people. This indicates a 133% growth in neobanking adoption in Portugal from 2023 to 2027.

Therefore, implementing regulatory conditions for neobanks is an important task for all countries worldwide.

# 2. Progressive foreign regulatory initiatives governing neobanks

The development of neobanking institutions is creating substantial investment opportunities, leading to a swift rise in demand and interest from consumers and investors. The commencement of neobanking activities involves specific bureaucratic procedures, notably the acquisition of a license for banking operation.

One of the first countries to implement a licensing and regulatory framework for neobanks (digital banks) is Pakistan. The State Bank of Pakistan (SBP) has developed and introduced the "Licensing and Regulatory for Digital Banks" (State Bank of Pakistan, n. d.).

According to the SBP document, neobanks can be granted two types of licenses: Digital Retail Bank (DRB) with a limited license, and Digital Full Bank (DFB). DRBs primarily concentrate on activities related to retail customers, while DFBs operate with both retail customers and businesses, including legal entities.

The process of obtaining neobank licenses in Pakistan consists of distinct stages: the pilot stage, the transitional stage and the acquisition of the commercial license.

The pilot stage, which lasts from 3 to 9 months, involves the neobank operating under a limited license. During this stage, the institution is prohibited from accepting deposits from the public and can only engage with a restricted group of individual clients. It is permitted to open deposit accounts for them and provide basic banking services. Regarding lending, the provision of credit services is restricted to 50% of the total deposit base of the bank.

The transitional stage lasts for three financial years after the launch of the neobank, but the SBP may shorten this period to one year if the bank complies with the licensing conditions, including regulatory capital requirements. During this stage, the bank is required to submit quarterly reports to the central bank detailing compliance with the necessary capital levels and the execution of the business plan.

In terms of the minimum capital requirements, DRB has to maintain a minimum capital of PKR<sup>1</sup> 1.5 billion (about USD 5 million) during the pilot phase. This amount will gradually rise over the three-year transitional period to reach PKR 4 billion (USD 13 million). Upon successfully completing the transitional phase, DRB becomes eligible to apply for a DFB license, as long as it satisfies the required minimum capital standards and successfully completes a two-year progress stage. The specific capital requirements are detailed in the *Table 2* (State Bank of Pakistan, n. d.).

Neobanks are also required to follow specific liquidity and leverage standards that are generally applicable to commercial banks. These standards include the Statutory Liquidity Ratio (SLR), Cash Reserve Requirements (CRR), Net Stable Funding Ratio (NSFR), Liquidity Coverage Ratio (LCR), and Leverage Ratio (LR).

Table 2
The minimum capital requirements for digital banks in Pakistan,
PKR billion/USD million

License	At grant of restricted license for pilot stage/	At commercial	of commercial		ancial year after the year al launch/ DFB license	
Type	Type DFB license	launch	year 1	year 2	year 3	
DRB	1.5 / 4.9	2 / 6.5	2.5 / 8.2	3 / 9.8	4 / 13	
DFB	6.5 / 21	-	8 / 26	10 / 36.7	_	

Source: developed by the authors on the basis of (State Bank of Pakistan, n. d.).

The Central Bank of Thailand also has implemented an advanced regulatory framework for neobanks, exemplified by the creation of the "Virtual Bank Licensing Framework" (Bank of Thailand, 2023, January). However, they plan to issue licenses from 2024 onwards. The Central Bank of Thailand has established compliance criteria for neobanks, known as the "Green Line" and "Red Line". The "Green Line" refers to the utilization of technologies, data, and the experience of digital services to provide financial services that create a new value proposition for better meeting the needs of each customer segment. Virtual banks must:

- offer a full range of financial services tailored to each customer segment, especially assisting underserved segments of retail customers and SMEs in conducting business and promoting financial discipline. Examples may include.
- deposit products where clients can set amounts and deposit frequencies that align with their cash flows and behavior.
- credit products where credit limits, terms, and interest rates are determined by each client's behavior and risk profile, discouraging excessive indebtedness;

<sup>&</sup>lt;sup>1</sup> PKR – Pakistani Rupees.

- provide a superior user experience for clients when utilizing financial services. Interfaces, processes, and procedures should be convenient, fast, secure, and align with clients' lifestyles.
- encourage healthy competition within the financial institutions system. All players are encouraged to engage in competitive innovations and enhance financial services, promoting proper financial access and offering products with higher quality, competitive prices, convenience, and user-friendly simplicity.

What virtual banks ("red lines") should not do is engage in business that creates risks for financial stability, depositors, and consumers in general. The Central Bank of Thailand expects that virtual banks should avoid:

- using unstable business models that create risks for the virtual bank's own business and its depositors;
- initiating "a race to the bottom" practices that lead to risks for financial stability. In particular, virtual banks should not employ aggressive pricing strategies to attract clients that are not sustainable in the long term. They should also refrain from encouraging excessive indebtedness through irresponsible lending;
- providing preferences to related parties or abusing a dominant market position. This can lead to unfair competition and harm consumer interests. Examples include offering preferential loans to related parties or compelling business partners of the virtual bank's related parties to use the financial services offered by the virtual bank (Bank of Thailand, 2023, January).

To ensure that virtual banks operate according to the "green line's" while not creating unacceptable behaviors by crossing the "red lines" mentioned above, the Central Bank of Thailand sets the licensing, regulatory, and supervisory framework.

*First*, virtual banks may provide full-service banking businesses to be flexible in accommodating changing customer needs. They must be registered in Thailand and establish a local headquarters in Thailand, provide a comprehensive range of services to meet customer needs and serve clients exclusively through digital channels.

Second, virtual bank applicants must meet qualifications to ensure they can achieve Green Lines sustainably.

Third, virtual banks shall go through a restricted phase during the initial years of operation. They must possess adequate capital and prepare an exit plan in case of business wind-downs. These would ensure virtual banks operate prudently during the initial years while not posing systemic risks. Virtual banks shall go through a restricted phase during the first 3–5 years. The Central Bank of Thailand will closely communicate and monitor the operations of newly licensed virtual banks during this period.

Newly established virtual banks shall have a paid-in capital of at least 5 billion baht on the day of business commencement. The level of paid-in capital shall gradually increase to at least 10 billion baht before the virtual

banks complete the restricted phase and operate in a full- functioning manner. This will ensure that virtual banks have adequate capital to support business expansion and cushion against potential initial losses.

Fourth, virtual bank applicants may request waivers on shareholding limits on a case-by-case basis. The Central Bank of Thailand shall consider the qualifications and behavior of the virtual bank applicant and may impose additional conditions prior to granting the request.

Fifth, virtual banks shall comply with the same regulations and supervision as traditional commercial banks. The Central Bank of Thailand will supervise virtual banks in a risk-proportionate manner, placing great importance on robust corporate governance and a sound risk culture. They must contribute to the Financial Institutions Development Fund (FIDF) and the Deposit Protection Agency (DPA) like all other financial institutions from the commencement of business during the restricted phase. Deposits at virtual banks will therefore receive the same protection as deposits at other financial institutions (Bank of Thailand, 2023, January).

# 3. Regulatory framework for neobanks within the EU

The regulatory landscape for neobanks in the European Union (EU) represents a dynamic framework designed to govern and supervise the operations of these innovative financial entities. The European regulatory framework for neobanks is rooted in principles aimed at fostering financial stability, consumer protection, and the prevention of financial crimes. *Table 3* delves into the key elements of the regulatory environment governing neobanks in the EU, examining the roles played by regulatory authorities, compliance requirements, and the evolving guidelines that shape the landscape for these fintech entities.

Table 3
Regulatory framework for neobanks in the European Union

Element	Description
Payment Services Directive 2 (PSD2) (Directive (EU) 2015/2366, 2015, 25 November)	This regulatory initiative aims to enhance competition, innovation, and security in the payment services market.  Directive influences neobanks by promoting Open Banking and requiring strong customer authentication. Neobanks leverage PSD2 to access customer account information, offer innovative payment services, and compete with traditional banks in a more dynamic and consumer-focused financial landscape. The directive fosters a competitive environment while emphasizing data privacy and consent in the evolving relationship between neobanks and regulatory frameworks
Electronic Money Directive (EMD) (Directive 2009/110/EC, 2009, 16 September)	The EMD establishes a regulatory framework for electronic money institutions, including neobanks.  Neobanks holding an electronic money license are permitted to provide payment services and issue electronic money

# Continuation the table 3

Element	Description
Licensing (Europe Central Bank, 2018, March)	Neobanks must obtain the necessary licenses to operate legally. This may include electronic money institution (EMI) licenses or full banking licenses, depending on the services offered. Neobanks may choose the type of license based on their business model, strategic objectives, and the range of services they intend to offer.  Obtaining a full credit or banking license, subject to the regulations imposed by the European Banking Authority (EBA) and national supervisory authorities, allows neobanks to offer a broader range of financial services, including lending and deposit-taking. However, this entails more substantial regulatory and compliance obligations, often accompanied by increased capital requirements.  Most neobanks have a payment license or electronic money institution (EMI) licenses, which allows neobanks to issue electronic money, provide payment services, and offer related financial products.  Licenses are issued by a regulatory or supervisory body, such as the Federal Financial Supervisory Authority (BaFin) in Germany, the Autorité de Contrôle Prudentiel et de Résolution/Prudential Control and Resolution Authority (ACPR) in France, NCAs, and other national competent authorities (NCAs)
Prudential Regulation (Europe Central Bank, 2023, September)	Neobanks with full banking licenses are subject to prudential regulations. The EU prudential requirements are part of the EU Single Rulebook, which aim to strengthen the resilience of the EU banking sector, while ensuring that banks continue to finance economic activity and growth. The prudential framework is composed of a directive – the Capital Requirements Directive (CRD V) – and a Regulation – the Capital Requirements Regulation (CRR II). These rules put the Basel III international standards into EU law
Consumer Protection Regulations (European Banking Authority, 2023, September a)	Neobanks must comply with rules that safeguard consumer rights, promote clear communication of terms and conditions, and facilitate effective dispute resolution. Adherence to consumer protection regulations is mandatory for neobanks, necessitating fair and transparent practices, and ensuring that disclosures regarding terms, fees, and risks are easily comprehensible to consumers. Neobanks must refrain from engaging in unfair commercial practices that could deceive or unduly influence consumers, including misleading advertising or any behavior that might harm consumers' economic interests
Anti-Money Laundering (AML) and Know Your Customer (KYC) Regulations (European Banking Authority, 2023, September b)	Neobanks must adhere to Anti-Money Laundering (AML) and Know Your Customer (KYC) regulations to counteract financial crime and uphold the integrity of the financial system. Ensuring stringent AML and KYC procedures is imperative for neobanks to prevent money laundering and terrorist financing. These processes encompass comprehensive customer identification, diligent due diligence, and the reporting of suspicious activities to the relevant authorities. The guidelines, which amend EBA/2021/02, focus on customer due diligence and the factors that credit and financial institutions should consider when evaluating the risk of money laundering and terrorist financing associated with individual business relationships and occasional transactions (referred to as "The ML/TF Risk Factors Guidelines") under Articles 17 and 18(4) of Directive (EU) 2015/849

End the table 3

Element	Description
Cybersecurity and Data Protection (Europe Data Protection Board, 2023, October)	Neobanks must comply with data protection regulations, such as the General Data Protection Regulation (GDPR).  Ensuring the security and confidentiality of customer data is critical, and neobanks must implement robust cybersecurity measures to protect against data breaches
Regulatory Facilitation Initiatives (AMF, 2016, 30 May; BaFin, 2023, September)	Some EU countries have introduced regulatory initiatives to facilitate innovative financial products and services, including those offered by neobanks, particularly:  France fosters fintech innovation through the Autorité des Marchés Financiers (AMF) having created the Fintech, Innovation, and Competitiveness Division. It focuses on identifying topics of importance in competitiveness and innovation and is responsible for analyzing the opportunities and new forms of risk to which the regulator and possibly investors have to respond. It is involved in the European discussions and tasked with assessing the need to adjust French regulations, or AMF policy, while maintaining a high level of investor protection. The FIC division is involved in financial center matters connected with international competitiveness.  In Germany Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) is actively involved in supporting fintech initiatives, notably through the FinTech Innovation Hub. This initiative offers a comprehensive overview of business models, technologies, licensing requirements, and supervisory laws, enabling clear and structured communication while aiding stakeholders in understanding assessments and specifications for a range of innovative financial technologies, including digital banking.  In the Netherlands, the Autoriteit Financiële Markten (AFM) and De Nederlandsche Bank (DNB) have collaborated to provide market participants with information regarding the regulation of innovative financial services and products, resulting in the establishment of the AFM & DNB Innovation Hub. This collaborative initiative offers insights into specific supervisory rules, guidance for navigating the Dutch supervisory landscape, information on potential supervision issues, and clarifications on supervisory rules applicable to innovative products and services of digital financial institutions. Additionally, by partnering with the Authority for Consumers & Markets (ACM), the Innovation Hub provides a resource for businesses seekin

Source: developed by the authors.

The regulatory landscape surrounding neobanks in the European Union, significantly influenced by directives PSD2 and EMD, underscores a commitment to fostering competition, innovation, and security in the financial sector. Through stringent licensing requirements, prudential regulations, consumer protection measures, and anti-money laundering protocols, neobanks are navigating a complex yet essential framework that prioritizes both market dynamism and consumer rights. Moreover, collaborative regulatory facilitation initiatives across EU countries amplify support for fintech innovation, cementing a foundation where neobanks can flourish while upholding regulatory standards and financial integrity.

# 4. Integration of positive regulatory experiences in neobanking into Ukrainian practices

Researching the domestic experience of neobank development in terms of their creation and licensing, it should be noted that Ukrainian neobanks have the opportunity to operate solely based on existing licenses of traditional banks. This is due to the absence of regulatory acts that govern their activities in Ukraine. However, in our view, such a form of existence has several drawbacks, with the main one being the inability to analyze the functioning of their activities from both the regulator's perspective and that of the users.

Additionally Ukrainian neobanks may encounter challenges and obstacles stemming from an imperfect regulatory framework, including:

- uncertainty and ambiguity, in particular, neobanks' founders and administrations may face challenges due to a lack of clarity or consistency in the regulatory environment. This uncertainty can hinder their ability to make informed business decisions and develop strategies for their growth, as well as restrain the attraction of investments in the neobanking sector;
- unreliability of services. In the absence of robust regulatory oversight, there may be a lack of confidence in customer protection measures, such as fraud detection mechanisms, data privacy, cybersecurity assurance, and the implementation of fair treatment practices and dispute resolution mechanisms. These challenges cause customers' distrust and low loyalty and impede neobanks from building a stable client base;
- security threats. Weak regulatory environments may expose banks to increased risks of engaging in financial frauds and cybercrimes, fostering conditions for money laundering, machinations, and inadequate cybersecurity. The absence of stringent oversight can lead to unethical business practices, market manipulation, and a heightened vulnerability to illicit financial activities, threatening both the integrity of the financial security and customer welfare;
- regulatory misalignments and cross-border compliance complexities. Inconsistent legislation with international norms poses a significant challenge, potentially straining resources and impeding the seamless execution of cross-border operations. This hurdle hinders the establishment of a cohesive international presence for neobanks. Moreover, the lack of adequate legislative support and detachment from foreign regulatory initiatives serve as impediments to fair competition within the global financial arena. This shortfall creates a disadvantage for Ukrainian neobanks, limiting their ability to compete on a level playing field with foreign financial institutions.

Considering this, it is necessary to develop and implement regulatory requirements for the functioning of neobanks. Therefore, we propose a roadmap for the implementation of regulatory conditions for the full functioning of neobanks in Ukraine (*Figure 3*).

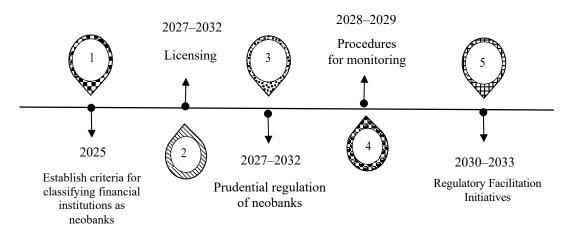


Figure 3. Roadmap for the implementation of regulatory conditions for neobanks' activity in Ukraine

Source: developed by the authors.

Analyzing the roadmap, we believe it is crucial, at the initial stage, to clearly define the primary criteria for classifying financial institutions as neobanks. Additionally, we recommend incorporating the concept of "neobanks" into the Law of Ukraine "On Banks and Banking Activities". It is important to highlight that Ukraine is actively integrating into the European market, and to facilitate this integration, alignment with the PSD 2 and Electronic Money directives is essential. While some domestic legislation has already adapted to these directives, incorporating specific regulatory requirements into the Law of Ukraine "On Payment Services" and other relevant laws, it is imperative to emphasize that these adjustments yet represent adaptation rather than complete integration.

Regarding *the second stage* of "Licensing" (during 2027–2032), we suggest the implementation of two types of licenses for neobanks: full and partial. A full license entails establishing a new financial institution that operates remotely and provides a comprehensive range of services. On the other hand, a partial license involves the operation of a neobank based on an existing license of a traditional bank, with the introduction of separate financial reporting and compliance with the regulator's requirements and standards. However, during the adaptation period of neobanks in the market, a "limited license" will be granted.

At the third stage, it is necessary to introduce changes to the prudential regulation of neobanks. During the period of the "limited license", which can be valid for 1 to 5 years, "special" capital conditions will be applied. As an example, recommendations developed by the central bank of Pakistan, which were reviewed earlier, can be considered. Additionally, the regulator should pay special attention to operational risks of neobanks, especially cybersecurity risks. Social engineering, malicious software, and phishing/farming are the three main cybersecurity threats faced by neobanks. These threats are aimed at gaining access to users' personal information, funds in bank

accounts, or other potentially destructive actions. Neobanks must adhere to European standards such as Know Your Customer (KYC) Regulations and the General Data Protection Regulation (GDPR).

The *fourth stage*, spanning from 2028 to 2029, aims to develop specific procedures for monitoring the activities of neobanks. In our view, it is pertinent to establish a new department within the National Bank for remote inspections of neobanks and consumer rights protection management, considering the specific nature of their operations. A particular focus should be placed on addressing money laundering by implementing robust processes to counter both money laundering and terrorist financing. Moreover, it is recommended to adopt European norms, particularly the Guidelines EBA/2021/02 on customer due diligence and the risk factors credit and financial institutions should consider. Additionally, adopting the ML/TF Risk Factors Guidelines under Articles 17 and 18(4) of Directive (EU) 2015/849 is crucial for aligning with international standards.

At the *fifth stage* (during 2030–2033), we propose to enhance the regulatory framework to facilitate the implementation of innovative financial products and services, especially those offered by neobanks, while simultaneously ensuring consumer protection and financial stability.

First of all, it is expedient to use the experience of the UK on setting up a regulatory sandbox, which establishes a secure space for businesses to experiment and refine their ideas, free from concerns about regulatory limitations impeding innovation, thus enabling early identification and mitigation of risks in the development process. The UK's Financial Conduct Authority (FCA) has successfully used regulatory sandboxes to encourage innovation, allowing fintech companies including neobanks to experiment within certain regulatory parameters (Regulatory Sandbox, 2023, August). Implementing a regulatory sandbox that allows neobanks to test innovative products and services in a controlled environment without facing immediate regulatory consequences in Ukraine will foster a dynamic environment that adapts to technological advancements and promotes the overall resilience and efficiency of the financial sector. This initiative may not only attract investments but also positions Ukraine as a favorable destination for financial technology development, potentially establishing the country as a regional hub for innovation in the financial industry. Secondly, following the approval of the Open Banking Concept by the National Bank of Ukraine (NBU, 2023, 10 August), there are plans to implement this innovation across the entire market and to extend support for the new payment infrastructure and other specified interactions by August 1, 2025. Starting from this date, banks and neobanks holding accounts must open interfaces and share customer information with certified Third-Party Providers (TPPs) providers, subject to customer consent. After completing the pilot phase, it becomes imperative to establish the necessary legal, technical, and human capabilities for thorough API analysis, resolution of conflicts between banks and TPPs, and effective

coordination among financial market regulators. It is crucial to tailor these capabilities to accommodate the specific needs and distinctive features of neobanks' activities.

## **Conclusions**

Summarizing the results of the research, we can conclude that the global financial market is developing very intensively. The number of neobanks and their users in the world is growing rapidly. Neobanks are attracting a lot of interest from investors, because the development of neobanks opens up significant investment opportunities. The domestic banking sector is gradually introducing and implementing innovations in accordance with global trends in the development of banking services. Domestic neobanking gained a particularly noticeable development during the coronavirus pandemic and now in the conditions of martial law. These circumstances stimulate the active development of digitalization and digital transformation of all processes in the country, and in particular domestic neobanking. The dynamic growth observed in the neobank sector necessitates regulators to establish a judicious and agile regulatory framework.

The regulatory approaches for neobanks vary globally, with notable examples from Pakistan, Thailand, and the European Union (EU). Pakistan's State Bank has implemented a detailed licensing and regulatory framework for neobanks, providing distinct licenses and staged processes to ensure a gradual and controlled entry into the market. Meanwhile, Thailand's Central Bank has introduced a "Virtual Bank Licensing Framework" with clear criteria, focusing on technology utilization and customer service, while establishing "Green Line" and "Red Line" guidelines to balance innovation and risk. In the EU, neobanks operate under a dynamic framework rooted in principles promoting financial stability, consumer protection, and prevention of financial crimes, with specific regulations like PSD 2, EMD, and robust prudential, consumer protection, AML/KYC, and cybersecurity standards. Moreover, certain EU countries, such as France, Germany, and the Netherlands, have introduced regulatory initiatives to facilitate innovation without compromising legal frameworks, emphasizing clear communication and support for fintech initiatives. Overall, these diverse regulatory models provide valuable insights for shaping a comprehensive and adaptive regulatory framework for neobanks in Ukraine, addressing the specific challenges and opportunities within the country's financial landscape.

The current regulatory landscape in Ukraine presents both opportunities and challenges for neobanks. While the absence of specific regulations allows them to operate under traditional bank licenses, this approach comes with drawbacks, notably the inability to undergo comprehensive analysis from regulatory and user perspectives. The imperfect regulatory framework further exposes neobanks to uncertainties, service unreliability, security threats, and cross-border compliance complexities, impeding their growth,

customer trust, and international competitiveness. Addressing these challenges through the development of a robust and aligned regulatory framework is essential for fostering a secure, transparent, and globally competitive neobanking sector in Ukraine. So, for now, the future development of domestic neobanks directly depends on state support for their activities and internal regulatory policy.

Considering the identified challenges, a roadmap for the implementation of regulatory conditions for neobanks' activity in Ukraine has been devised. The proposed roadmap outlines five strategic stages, emphasizing the need for clear classification criteria, alignment with European directives, and the implementation of distinct licenses for neobanks. The plan addresses prudential regulation, cybersecurity, and monitoring procedures, culminating in the promotion of innovation through the establishment of a regulatory sandbox and adherence to the Open Banking Concept. This comprehensive approach aims to position Ukraine as a regional hub for financial technology development while ensuring regulatory compliance and fostering a dynamic and resilient financial ecosystem.

Future research endeavors could focus on evaluating the effectiveness of the proposed regulatory roadmap, gauging its influence on the development of neobanks, and examining the role of state support in shaping the trajectory of domestic neobanking. A comprehensive analysis of stakeholders' perceptions and experiences within the evolving neobanking landscape would offer valuable insights into the sector's broader impact on financial inclusion and consumer needs satisfaction.

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