УДК: 336.71.001.76(477)=811.111
https://doi.org/10.32342/3041-2137-2025-1-62-8

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SCENARIOS OF TRANSFORMATION OF THE BANKING SYSTEM UNDER THE INFLUENCE OF INNOVATIONS: UKRAINIAN SPECIFICITY

Innovativeness is an integral feature of the modern economy, particularly in the banking sector. The authors of this article aimed to identify potential scenarios for the transformation of the banking system under the influence of innovations and increased competition from fintech organizations. They sought to explore the components of the market mechanism for the self-regulation of innovative activities in commercial banks, the tools and methods of state influence on these processes, and, based on a study of global experience, to justify proposals for intensifying the introduction of innovations by commercial banks in Ukraine. The study examined five possible scenarios for the transformation of Ukraine's banking system: (1) modernization of existing banks using the latest technologies, allowing them to maintain relationships with clients; (2) replacement of traditional banks with new (neo-banks) that operate under a different business model; (3) fragmentation of financial services between specialized fintech companies and traditional banks; (4) banks being pushed out of direct client relationships and becoming service providers; and (5) the complete displacement of traditional banks, replaced by other structures. The analysis of transformations in Ukraine's banking system revealed elements of each of these scenarios without the dominance of any single one. Fintech companies operate according to the «niche» principle, targeting untapped market segments, services, or technologies in an effort to succeed. Banks, in contrast, tend to be more conservative, a result of the greater regulation governing their activities. However, the development of payment systems in Ukraine demonstrated that fintech companies initially dominated this sector until large banks entered the market and displaced other players. In reality, banks have more resources (both financial and organizational) to introduce certain innovative products or technologies. The successful implementation of these innovations will depend largely on the interplay between the market mechanism of self-regulation and state regulation. Following the principles outlined in the research for state innovation policy will enhance its effectiveness and facilitate the integration of Ukraine's banking system into European and global financial markets.

Keywords: banking system, fintech companies, banking system transformation scenarios, general and specific state regulation of banking innovations
JEL classification: ***G18, G21, G23, G28, O16, O31, O38***

Інноваційність є невід'ємною рисою функціонування сучасної економіки взагалі та її банківського сектору, зокрема. Автори статті поставили за мету визначити можливі сценарії трансформації банківської системи під впливом інновацій та посиленої конкуренції з боку фінтех-організацій, складові ринкового механізму саморегулювання інноваційної діяльності комерційних банків, інструменти та способи впливу держави на ці процеси, а також на підставі вивчення світового досвіду обґрунтувати пропозиції щодо інтенсифікації запровадження інновацій комерційними банками України. Досліджено специфіку п'яти можливих сценаріїв трансформації банківської системи України: (1) модернізація існуючих банків на підставі використання новітніх технологій, що дозволяє їм зберегти відносини з клієнтами; (2) заміна старих банків новими (необанками), які мають іншу бізнес-модель; (3) фрагментація фінансових послуг між спеціалізованими фінтех-компаніями та постійними банками; (4) витіснення банків з відносин з клієнтами і перетворення їх на постачальників послуг; (5) повне витіснення банків у традиційному розумінні та їх заміна іншими структурами. Проведений аналіз трансформацій у банківській системі України показав наявність ознак кожного з зазначених сценаріїв без домінування жодного з них. Фінтех-компанії працюють за «нішовим» принципом, обираючи сегменти ринку, послуги чи технології, які є «вільними», та намагаються досягти там успіху. Банки ж є більш консервативними, що можна, зокрема, пояснити більшою «зарегламентованістю» їх діяльності. Однак досвід розвитку платіжних систем в Україні показав, що панування фінтех-компаній у цій сфері було до того часу, поки великі банки не вийшли на цей ринок, витісняючи інших гравців. Реально, банки мають більше можливостей (фінансових та організаційних) для запровадження тих чи інших інноваційних продуктів чи технологій. Реалізація цих можливостей багато в чому буде залежати від поєднання ринкового механізму саморегулювання інноваційної діяльності з її державним регулюванням. Дотримання в державній інноваційній політиці принципів, виділених у дослідженні, зробить цю політику більш ефективною та сприятиме інтеграції української банківської системи до європейського та світового фінансових ринків.

Ключові слова: банківська система, фінтех-компанії, сценарії трансформації банківської системи, загальне та специфічне державне регулювання банківських інновацій
JEL classification: ***G18, G21, G23, G28, O16, O31, O38***

Statement of the problem and its connection with important scientific or practical problems. The modern financial sphere is highly changeable and dynamic. Over the past few decades, significant changes have occurred in all areas of financial relations, and banking activity has been no exception. Today, new banking products and technologies emerge almost daily, existing ones are constantly being improved, and organizational forms of delivering banking services are evolving. Innovation has become an essential condition for the successful operation of commercial banks, primarily as a response to the demands of a competitive environment. It is important to recognize that commercial banks are business entities, and their ultimate goal remains profit maximization. Therefore, innovative activity is not an end in itself, but a means of achieving this ultimate goal. At least three key reasons drive banks to actively pursue innovation:

- expanding into a region or niche of the financial market without a physical presence, in order to grow their client base;
- gaining a competitive advantage through product diversification and strengthening market position;
- reducing operating costs and improving economic efficiency indicators.

However, a fourth reason has been added to these motives: integration into the European and global financial markets. The Ukrainian banking system cannot remain isolated from global processes. Therefore, it is important to understand not only the trends in the development of the domestic banking services market but also the changes occurring in the global financial system.

The variety of motives driving innovative activity leads to a diverse range of forms and methods for implementing banking innovations. Classifying and grouping these innovations is valuable not only from a cognitive and scientific perspective but also from a practical one. It allows for a comprehensive and systematic view of the innovation process and enables more informed management decisions regarding a bank's development strategy and operational activities. Additionally, studying the innovative practices of commercial banks in other countries can provide a valuable foundation for adapting these strategies to Ukrainian conditions.

Of course, the deeper motives behind the innovative activity of commercial banks lie within the mechanisms of market self-regulation and are revealed through categories such as «demand,» «supply,» «competition,» «costs,» and «profit.» However, it is well known that finance in general, and the banking system in particular, have a significant impact on the broader economy. It is also understood that banking innovations, especially those driven by digitalization, not only create new opportunities but also pose serious threats to economic stability. This is why innovative banking activities cannot be overlooked by the state and its regulatory bodies. In reality, innovation occurs through the interaction of market self-regulation and state regulation. These considerations define the purpose and objectives of this research.

Analysis of recent studies and publications, which laid the foundation for solving the problem under study, and highlighting previously unresolved parts of the general problem, which are the subject of the article. The innovative activity of commercial banks is a popular topic of scientific research and publications among both Ukrainian and foreign researchers. Different methods and approaches are used by authors to define the essence of innovations, their classification, and their role in achieving the commercial goals of banks. Many researchers emphasize the need for an integrated approach to innovation. In their view, innovation should align with the overall vision of the bank's model.

The concept of the so-called "everyday bank" is gaining popularity, offering a comprehensive solution for customers that ensures constant daily interaction with the bank. Leveraging digital tools, such a bank transforms its entire business model, gaining access to new sources of business, customers, and profit pools. Increasing competition from non-bank financial structures demands that commercial banks go beyond merely "greater digitalization" of existing banking products and technologies. They must adopt a new business vision that complements their traditional intermediary functions with new capabilities, such as providing clients with advisory services and information that enable more informed decision-making. In this context, trust in the bank grows, and it becomes a true business partner for its clients [1].

Modern innovative activities of commercial banks are most often associated with financial technologies. ***Financial technologies*** (fintech) have been defined by the Financial Stability Board as "technological innovations in financial services that may lead to new business models, applications, processes or products with associated significant impact on the provision of financial services" [2].

The study of D. Broby is devoted to the analysis of the impact of fintech on traditional banking operations and possible changes in regulatory practice due to technological progress. The author proposed four strategies for different types of financial structures in a dynamic competitive environment: for existing companies to solve the problem of customer retention; for new businesses to explore low-cost digital experiences; for niche players to provide an adequate banking service; for social media platforms to develop payment applications. These strategies will be successful when financial structures (in particular, banks) will not be limited to making payments, but will also provide other services [3].

There are a number of studies that analyze the innovative activity of the banking systems of individual countries: Greece [4], Palestine [5], China [6], UAE [7]. Publications that study the impact of innovations based on digitalization on the efficiency of banks are quite common. In particular, it is even proposed to use a special term - digital operational efficiency (DOE) [8]. To measure it, as a rule, the Operational Efficiency Index (OEI) is used, which is calculated by dividing costs by income [9].

The research devoted to the introduction of modern technologies into the practices of commercial banks deserves special attention. For instance, the authors of the article [10] analyze the possibilities of using blockchain technology in the banking systems of developing countries. The results of the study indicate that the primary obstacles to the adoption of this technology in these countries include scalability issues, the complexity of the tasks to be addressed, a lack of adequate proposals from blockchain service providers, and the absence of favorable regulatory laws and widely accepted standards. It is important to understand that new technologies not only provide banks with new opportunities but also introduce new threats, such as cybercrime and violations of confidentiality principles. These conclusions can also be applied to the Ukrainian banking system, with certain caveats.

Recently, research focused on analyzing the use of artificial intelligence in banking activities has intensified significantly. A review of 44 articles on this topic, published after 2005, revealed that the most promising areas for the use of artificial intelligence are the development of banking strategies, the improvement of process management, and the enhancement of customer service [11].

At the same time, innovations, particularly those based on artificial intelligence, often outpace existing state regulations governing banking activities and come into conflict with them. A mechanism is needed to allow for the timely coordination of innovation development and implementation with regulatory requirements. In this context, the idea of creating “regulatory sandboxes” has gained popularity in recent years. These sandboxes provide a new model of interaction between developers and regulators, enabling mutual understanding and the timely adjustment of both innovations and regulatory standards. The experience of China’s banking system is notable in this regard, where their own version of a regulatory sandbox was officially launched in Beijing on December 5, 2019 [12]. In Ukraine, there are also plans to launch a regulatory sandbox for artificial intelligence developers, allowing them to ensure that each step of development complies with the requirements of the European Act on Artificial Intelligence, proposed by the European Commission in 2021 [13].

Highlighting previously unsolved parts of the general problem, to which the specified article is devoted. Despite the vast number of publications devoted to the innovative activities of commercial banks, several questions remain unanswered. These include, for example:

- Which is more promising: adopting the strategy of a universal bank or a specialized bank?
- How serious is the competition from fintech organizations for traditional banks?
- How can the state achieve effective regulation of banks’ innovative activities without undermining the market mechanism of self-regulation?
- What trends in the development of Ukraine’s banking system can be expected in the near and distant future?

We will attempt to offer our perspective on these and other questions related to the innovative activities of commercial banks.

Statement of the objectives of the article. The authors aim to determine possible scenarios for the transformation of the banking system under the influence of innovations and increased competition from fintech organizations. They also seek to identify the components of the market mechanism for the self-regulation of innovative activities in commercial banks, as well as the tools and methods of state influence on these processes. Additionally, based on a study of global experience, the authors aim to substantiate proposals for intensifying the adoption of innovations by commercial banks in Ukraine.

Presentation of the main research material with full justification of the scientific results obtained. For a long period, two models of the organization of the banking system were distinguished in the economic literature: one based on universalization and one based on specialization. The first envisaged the dominance of large universal banks that tried to provide the entire range of banking services. It is more characteristic of European countries, and therefore it is often called European. The second involves the presence of a small number of large universal banks and a large number of specialized banks that provide only a certain part of banking services: investment, mortgage, savings banks, etc. This model is observed, in particular, in the USA and Japan, and therefore has the name American.

However, under the influence of radical innovations (product, market, and process), which in recent years have impacted all aspects of banking activity, and due to growing competition from non-banking organizations, the very concept of an optimal, competitive model for a modern bank is evolving. In 2018, the Basel Committee on Banking Supervision outlined five scenarios for the future structure of the banking sector:

1. ***Better bank***. According to this scenario, existing banks carry out modernization based on digitalization, use the latest technologies aimed at providing modern services to preserve existing relationships with clients and to provide traditional banking services [14].

Despite significant changes, the bank's business model remains largely traditional. One key element is an extensive network of branches and offices. As of January 1, 2024, there were 5,138 active structural divisions of banks in Ukraine, serving 63 banks. The clear leaders in this regard are the state-owned Oschadbank and Privatbank, with 1,182 and 1,132 branches, respectively. The reduction in the total number of branches observed in 2023 was primarily due to the liquidation of certain banks [15].

2. New bank. In this case, existing banks are replaced by new banks built on a different business model. These banks, often referred to as "neo-banks", focus entirely on digital technologies in their interactions with clients. They are capable of providing almost the full range of banking services but in a more convenient and cost-effective manner, without the need for physical branches. In most cases, they obtain a banking license in accordance with regulatory requirements; however, they may also operate as non-banking organizations [14].

Neo-banks can emerge as entirely new entities (a practice observed in countries such as the UK, USA, Germany, the Netherlands, Argentina, and others) or as a result of the transformation of existing banking structures. An example of the latter is the activity of Universal Bank JSC. With a 20-year history in Ukraine's banking market, the bank launched the retail product "Monobank" in collaboration with the Fintech Band team. This application, which offers a wide range of financial services, operates exclusively on mobile devices and has become quite popular among the new generation of users.

However, there is currently insufficient evidence to suggest that this scenario will become dominant. Its share in the overall volume of banking services remains relatively small.

3. Distributed bank. This scenario involves the fragmentation of financial services between specialized fintech companies and traditional banks [14]. On one hand, this division of the financial services market has positive effects. It leads to a "division of labor," where specialization allows individual entities, whether fintech companies or banks, to perform their functions more efficiently and at lower costs. This aligns more closely with the model of specialized banks and is in line with the American banking system model.

Of course, the second aspect of the division of labor – cooperation – is especially important. Fintech companies and banks should cooperate rather than compete. As a result, joint platforms, partnerships, and sometimes consortia may be created.

On the other hand, this scenario contradicts the client's desire to receive a full range of services in one place. Earlier, we discussed the "everyday bank" model, which aligns more with universalization than specialization.

A number of Chinese researchers share this perspective. They conducted a comparative analysis of the organizational innovations at Citibank and the Industrial and Commercial Bank of China (ICBC) during their transition to mobile internet-based financing. From this analysis, they identified several challenges that are common to all banks seeking to shift from the traditional model to the "everyday bank" model. The most significant of these challenges may include the following:

1. Recognize that the landscape of banking has fundamentally changed. In the future, traditional commercial banks may disappear. Financial technologies significantly reduce information asymmetry, and the mobile Internet is not only a platform but also a critical tool for the development of banks.

2. Commercial banks will need to completely overhaul their overall strategy. Transitioning to the "everyday bank" model involves a comprehensive transformation of the entire business, encompassing strategy, organization, technology, finance, human resources, and products.

3. On the path to becoming an "everyday bank," it is essential to optimize the balance between external and internal technical and human resources. Banks should strive to own their core technologies, as technological capability could become the primary strength of banks in the future.

4. The organizational structure and workforce should align with innovation and the demands of everyday banking.

5. A new system of banking values, based on the mobile Internet, will need to be developed.

6. It is necessary to optimize technologies, enhance risk control, and adapt to the open Internet environment and the evolving regulatory landscape [16].

4. Relegated bank: existing banks become commodity service providers, and relations with clients are transferred to the ownership of new intermediaries [14].

In this scenario, banks often lose direct contact with customers as intermediaries emerge, offering a range of financial services directly to clients. Banks, in turn, are assigned roles such as performing specific operations, including client verification and identification, assessing account status, and handling transfer capabilities. Fintech companies, or large technology enterprises, utilize vast databases, cloud technologies, and artificial intelligence to determine customers' real needs and offer appropriate services, either on their own behalf or by redirecting clients to banks.

At first glance, this scenario may seem unlikely. However, numerous facts suggest otherwise. For example, we can point to the growing popularity of money transfer systems in Ukraine. The National Bank of Ukraine provides detailed statistics on the operations of these systems (excluding transfers made through banks, "card" payment systems, and post offices). Analyzing this data allows us to draw several important conclusions.

1. *The provision of this type of financial service in Ukraine is developing at a rapid pace.* In 2017, the total amount of transfers made within Ukraine using payment systems created by both residents and non-residents amounted to the equivalent of $4.456 billion. By 2023, this figure had increased to $19.901 billion, nearly 4.5 times higher, representing an average annual growth of 35% (Fig. 1). It is worth noting that although the payments were primarily made in hryvnias, the growth rate in U.S. dollar terms outpaced other macroeconomic indicators, despite the negative fluctuations in the exchange rate of the national currency.

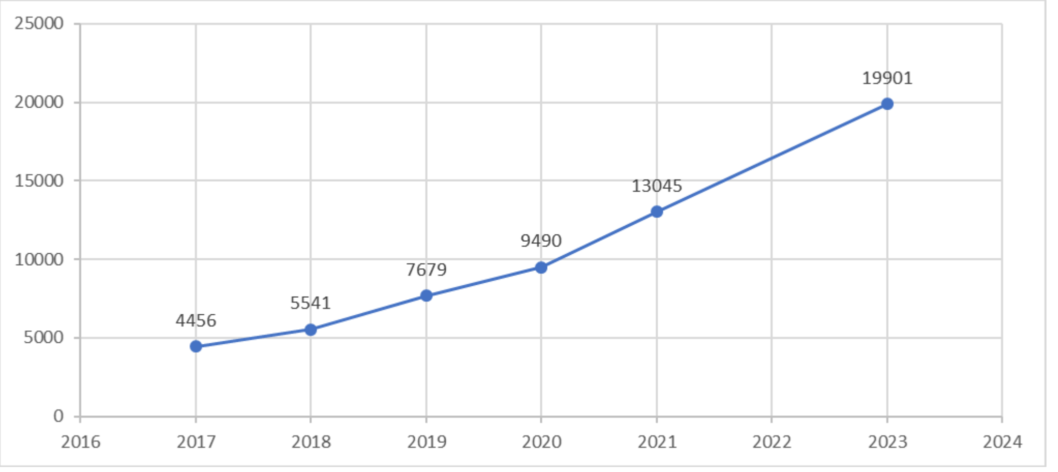


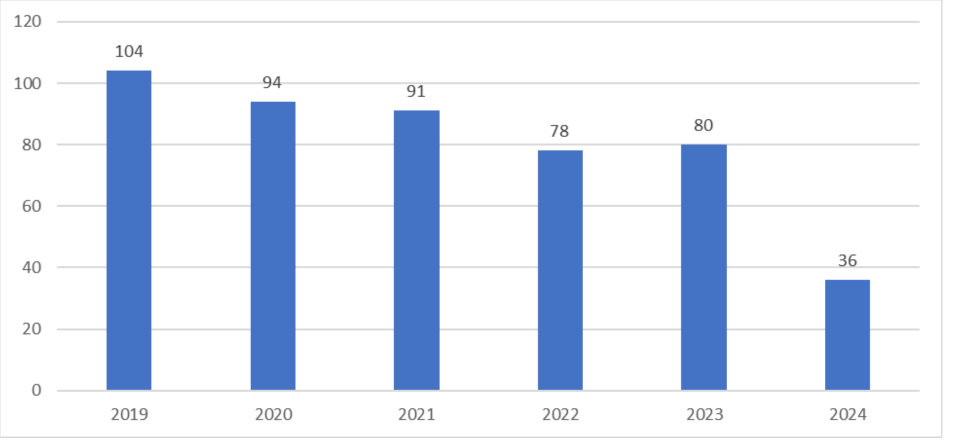
Fig. 1. The total amount of transfers made in Ukraine using payment systems created by both residents and non-residents (million dollars)
(calculated according to: [17-21])

2. *In the development of money transfer systems, non-bank financial structures have created significant competition for traditional banks*. For a long time, the NovaPay system, which primarily served Nova Poshta, was the undisputed leader. This system reached its peak in 2020, when 47% of all transfers were made through Nova Poshta. Overall, in the same year, the top seven positions in the ranking of the largest participants in payment systems were occupied by non-bank structures, which accounted for 87% of all transfers. Only in the eighth position was a bank (Bank of Investments and Savings JSC) represented, with a share of 2.47%. At that time, Ukraine's largest bank, CB "Privatbank," was not even among the top 10 participants in payment systems. Therefore, it can be confidently asserted that non-bank structures have become the driving force behind the creation and growing popularity of this service.

3. *In the field of money transfer services, there is a clear trend toward consolidation and a reduction in the number of participants providing such services.* In 2019, there were 104 participants in this sector, but by the first quarter of 2024, that number had decreased by 36 (a threefold reduction!) (Fig. 2). Even some players that once held leading positions exited the market. For example, as of January 1, 2024, the license for the Ukrposhta payment system, which held nearly 20% of the market share in 2020, was terminated. While the ongoing war resulting from Russian aggression has certainly impacted these processes, analysis shows that the trend toward consolidation began before the war and significantly accelerated in 2024.

4. *The money transfer services market in Ukraine is oligopolistic.* Throughout the period studied, the market share of the three largest participants fluctuated around 70%, and in the first quarter of 2024, it reached 82%. This conclusion is further supported by the calculation of the Herfindahl-Hirschman Index (Fig. 3). In all years, the index exceeded 1,500, indicating limited competition. In both 2020 and 2024, it surpassed 2,500, which is a clear indication of the oligopolistic nature of competition in this market. This situation could be a strong argument for state regulation in this area of activity.

5. A 2024 review of the literature on fintech and competition in the banking sector by experts from the Basel Committee on Banking Supervision emphasizes that "fintech has stimulated innovation and competition in banking services, including payments, lending, deposit-taking, and advisory services. The emergence of new financial technology-based service providers

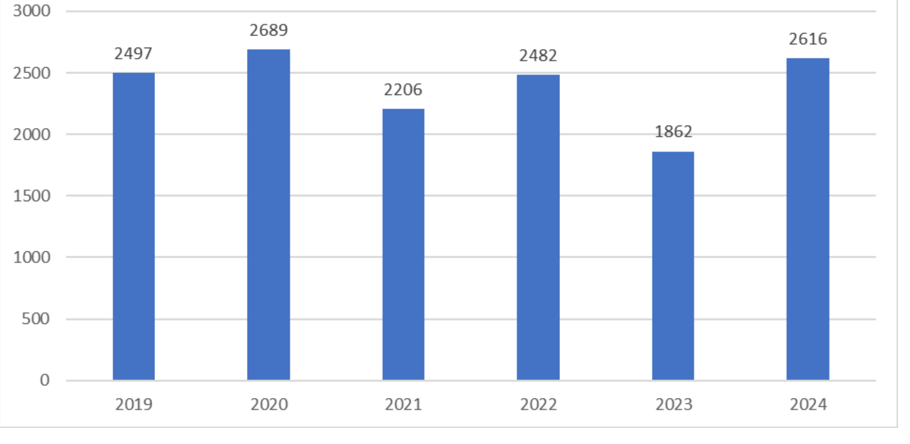


2022 – May-December;
2024 – first quarter.

Fig. 2. Number of participants of money transfer systems created by residents in Ukraine
(calculated according to: [17-22])

has expanded access to financial services and put pressure on the market share and pricing power of existing banks" [23]. *Indeed, many innovative technologies originate from non-banking structures. However, large banks possess enough market power to adopt proven fintech innovations on a large scale, allowing them to significantly challenge non-bank entities in the market.*

As previously mentioned, non-bank structures were the initiators and drivers of the spread of money transfer systems in Ukraine. As shown in Table 1, by 2022, the share of money transfer systems created by non-banking institutions exceeded 90%. The turning point occurred in 2023, when the transfer system created by CB "Privatbank" began to operate actively. As a result, by the



2022 – May-December;
2024 – first quarter

Fig. 3. The value of the Herfindahl-Hirschman index for the market of funds transfer systems services created by residents in Ukraine
(calculated according to: [17-22])

first quarter of 2024, the banking sector's share increased to 58%, with almost 40% of this accounted for by Privatbank, which took the top position in the rankings. The traditional leader, NovaPay, with a 25% share, dropped to second place.

Thus, the analysis confirms the validity of the conclusion that, despite the rapid development of non-banking structures and their narrow specialization, the business model that combines a full range of financial services in the form of a bank remains highly competitive.

5. ***Disintermediate banks***. In this scenario, traditional banks have become irrelevant, as customers interact directly with individual financial service providers [14]. The financial services market is now filled with numerous platforms and technologies that are displacing banks. Customers can make payments, obtain loans, or raise capital without needing to go through banks. However, while this gives customers greater freedom of choice, it also exposes them to higher levels of risk. The risks traditionally borne by banks now fall directly on the clients.

This scenario might seem like economic fiction, yet some elements of this model already exist today. A clear example of savings, payments, and investments occurring outside the banking system, without requiring bank participation, is the circulation of cryptocurrency. Although such cases are still relatively few, this scenario deserves consideration as a potential option for the future reform of the banking system.

Therefore, each of the proposed scenarios has a chance of being realized. In real life, there are numerous examples that confirm the likelihood of development in one direction or another. In our view, the complexity and multifaceted nature of the financial market make it unlikely that its future development can be captured by a single scenario. A combination of several scenarios is the most probable outcome. This will depend on two main factors:

- *economic efficiency of the scenario*. As previously mentioned, the ultimate goal of banking innovation is to achieve greater effectiveness. This can manifest in various ways, such as increased profits, improved market position, or even survival in challenging conditions. Therefore, the scenarios most likely to be implemented are those that best align with the economic objectives of the entities pursuing them. In other words, the market mechanism of self-regulation will come into play here;

- *state regulation of banking innovations and fintech activities*. The financial sector is one of the most heavily regulated by the state. This is due, in part, to the critical role that finance plays in both maintaining economic stability and contributing to crisis

Table 1

Distribution of transfer amounts in terms of money transfer systems created by banking and non-banking institutions within Ukraine, % ***

Year	Share, in percentage	
	money transfer systems created by banks	money transfer systems created by non-banking institutions
2019	9	91
2020	5	95
2021	4	96
2022*	6	94
2023	17	83
2024**	42	58

*2022 – May-December;

***2024 – first quarter*

**** Calculated according to: [17-22]*

situations. Nearly all major crises in recent decades have had a financial component. Additionally, the movement of money is a domain with a high potential for abuse. As a result, the state seeks to mitigate these risks by establishing relevant “rules of the game”.

Thus, to understand the prospects for the development of banking innovations, it is important to examine the interaction mechanism between market self-regulation and state regulation.

State regulation of banking innovation activities can be classified according to several criteria (Table 2).

The general regulation of innovative activity applies to all economic entities of the country. According to some researchers, three types of general state innovation policy can be distinguished:

- technological push,
- market orientation,
- social orientation, aimed at reforming the economic structure of the economic mechanism [24, p. 122].

In Ukraine, the law «On Innovative Activity» was adopted back in 2002, which «determines the legal, economic, and organizational principles of state regulation of innovative activity in Ukraine, establishes forms of state stimulation of innovative processes, and is aimed at supporting the development of the Ukrainian economy through innovation» [25]. However, over the more than 20-year history of its implementation, the state’s innovation policy has revealed significant shortcomings. As a result, Ukraine’s position in the global innovation rankings has declined somewhat in recent years. In the 2021 ranking, Ukraine was ranked 49th, but by 2023, it had fallen to 55th. The absolute value of the index also dropped from 35.6 to 32.8. Despite this decline, Ukraine consistently remains among the top three countries in its income group (lower-middle-income) [26-28]. A more detailed analysis of the indicators that make up the Global Innovation Index revealed significant areas for improvement, most of which fall under the responsibility of the state. Therefore, targeted actions are essential to improve the business environment and develop the necessary organizational and market infrastructure. This is crucial not only for improving Ukraine’s standing in the global innovation index but also for the success of post-war reconstruction [29, p.15].

Particular regulation refers to actions taken by the state to establish the “rules of the game” for the financial sector, applicable to both banks and other organizations operating in this environment. An example is the adoption of the second Payment Services Directive (PSD2) by the European Commission in 2015, which set rules for all retail payments in the EU. PSD2 removed barriers for new types of payment services, improved consumer protection and security, and aimed to ensure a level playing field for both existing and new providers of card, internet, and mobile payments. It sought to enhance efficiency, transparency, and choice

Table 2

Classification of state regulation of banking innovations*

Criterion	Type
By scope	General regulation
	Particular regulation
	Special regulation
By the method of influence	Direct regulation (administrative methods)
	Indirect regulation (economic methods)
For regulatory purposes	Supervision and control
	Stimulation
	Regulation

* *Developed by the authors*

of payment instruments for consumers and merchants, facilitate the market expansion of innovative payment services, and ensure a high level of protection for payment service users across all member states [30]. A key component of this directive was the provision allowing third-party access to customer bank accounts with their consent, along with the creation of uniform security and authentication standards. This created a level playing field for both banks and fintech companies.

It should be emphasized that this directive applies not only to the Eurozone but to all countries of the European Union. Therefore, as Ukraine progresses toward EU membership, it will need to comply with the provisions of this document, particularly in terms of creating equal conditions for both existing and new payment systems and facilitating account access. Although these principles are formally declared, their practical implementation faces significant challenges.

In Ukraine, the Law "On Payment Systems and Fund Transfers in Ukraine" [31], which regulates the operation of payment systems and the introduction of new payment technologies, is among the key regulatory documents. Another important regulation is the Law "On Financial Services and Financial Companies," which "establishes the general principles for the functioning of the financial services market, the activities of providers of financial and/or ancillary services, state regulation and supervision of such activities, as well as the protection of clients' rights. It also defines the legal status of financial companies and pawnshops, the organizational and legal principles of their creation, operation, reorganization, and termination of activities in providing financial services, along with the powers of the Regulator regarding state regulation and supervision of these institutions" [32].

Special regulation governs the activities of specific groups of financial market entities (for example, the Law of Ukraine "On Banks and Banking Activities") or specific parts of the market (such as the Law of Ukraine "On Capital Markets and Organized Commodity Markets").

However, analysis shows that Ukraine's current approach to regulating the financial market still differs significantly from European and global practices, even though the general direction is similar. Therefore, as Ukraine adopts European financial law norms, it will need to develop a large number of laws and by-laws from the regulator (primarily the National Bank of Ukraine). In doing so, it is essential to adhere to the following fundamental principles:

1. ***Harmonization of legislation with market needs***. Legislation must be flexible and adaptable to respond to rapid changes in financial technology and innovation. As already noted, this may include the creation of "regulatory sandboxes" where banks and fintech companies can test new products and services in a controlled environment.

2. ***Cooperation between regulators, banks and fintech companies***. It is important that public authorities work with real financial service providers to share information and experience. This will help to develop effective regulatory policies and reduce barriers to innovation.

3. ***Ensuring equal conditions for all market participants***. Regulatory policy should be aimed at ensuring a level playing field for all banks and fintech companies, regardless of their size or form of ownership. This includes anti-monopolization and promotion of competition.

4. ***Balance between innovation and stability: Regulators must find a balance between stimulating innovation and maintaining financial stability***. This may include setting certain limits on risky transactions and ensuring a sufficient level of capital to cover possible losses.

Conclusions. Innovations in financial services have the potential to fundamentally transform not only the content and nature of the services provided but also the recipients of those services. In addition to the banks that have traditionally operated in financial markets, numerous fintech companies and large technology firms are emerging, creating competition for the banking system. This transformation of the traditional banking system is driven both by the influence of innovations and the pressures of growing competition. There are various forecasts regarding the future development of banking systems; however, the five scenarios outlined by the Basel Committee on Banking Supervision are considered the most likely.

The analysis of transformations in Ukraine's banking system reveals signs of each of the specified scenarios, without any single one dominating. Fintech companies operate according to a "niche" strategy, targeting market segments, services, or technologies that are not fully occupied and striving to succeed there. Banks, on the other hand, tend to be more conservative, which can be explained, in part, by the greater regulation of their activities. However, the development of payment systems in Ukraine demonstrated that fintech companies initially dominated this area, but were eventually displaced when large banks entered the market. In reality, banks have greater financial and organizational resources to introduce certain innovative products or technologies. The successful implementation of these innovations will largely depend on the interplay between the market's self-regulation mechanisms for innovative activities and state regulation. Adhering to the principles outlined in the research for state innovation policy will make this policy more effective and support the integration of Ukraine's banking system into European and global financial markets.

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SCENARIOS OF TRANSFORMATION OF THE BANKING SYSTEM UNDER THE INFLUENCE OF INNOVATIONS: UKRAINIAN SPECIFICITY

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https://doi.org/10.32342/3041-2137-2025-1-62-8

Keywords: banking system, fintech companies, banking system transformation scenarios, general and specific state regulation of banking innovations
JEL classification: ***G18, G21, G23, G28, O16, O31, O38***

Innovativeness is an integral feature of the modern economy, particularly in the banking sector. The authors of this article aimed to identify potential scenarios for the transformation of the banking system under the influence of innovations and increased competition from fintech organizations. They sought to explore the components of the market mechanism for the self-regulation of innovative activities in commercial banks, the tools and methods of state influence on these processes, and, based on a study of global experience, to justify proposals for intensifying the introduction of innovations by commercial banks in Ukraine. The study examined five possible scenarios for the transformation of Ukraine's banking system: (1) modernization of existing banks using the latest technologies, allowing them to maintain relationships with clients; (2) replacement of traditional banks with new (neo-banks) that operate under a different business model; (3) fragmentation of financial services between specialized fintech companies and traditional banks; (4) banks being pushed out of direct client relationships and becoming service providers; and (5) the complete displacement of traditional banks, replaced by other structures. The analysis of transformations in Ukraine's banking system revealed elements of each of these scenarios without the dominance of any single one. Fintech companies operate according to the "niche" principle, targeting untapped market segments, services, or technologies in an effort to succeed. Banks, in contrast, tend to be more conservative, a result of the greater regulation governing their activities. However, the development of payment systems in Ukraine demonstrated that fintech

companies initially dominated this sector until large banks entered the market and displaced other players. In reality, banks have more resources (both financial and organizational) to introduce certain innovative products or technologies. The successful implementation of these innovations will depend largely on the interplay between the market mechanism of self-regulation and state regulation. Following the principles outlined in the research for state innovation policy will enhance its effectiveness and facilitate the integration of Ukraine's banking system into European and global financial markets.

Одержано 20.05.2024.