DOI: 10.55643/fcaptp.5.64.2025.4878

Mykhailo Kuzheliev
D.Sc. in Economics, Professor of the Department of Finance, National University of "Kyiv-Mohyla Academy", Kyiv, Ukraine;
ORCID: 0000-0002-7895-7879

Alina Nechyporenko
PhD in Economics, Department of Finance, Borys Grinchenko Kyiv Metropolitan University, Kyiv, Ukraine;
ORCID: 0000-0003-2494-1465

Mariana Sulyma
PhD in Economics, Associate Professor of the Department of Finance, Borys Grinchenko Kyiv Metropolitan University, Kyiv, Ukraine;
e-mail: m.sulyma@kubg.edu.ua
ORCID: 0000-0002-5297-7388
(Corresponding author)

Serhii Ovcharuk
Director of the Reporting and Controlling Department, Terra Food Group (Terra Food LLC), Kyiv, Ukraine;
ORCID: 0009-0000-6285-1693

Mariana Leontieva
Chief Expert of the Collateral Valuation Division of the Collateral Valuation and Monitoring Department, TASKOMBANK JSC, Kyiv, Ukraine;
ORCID: 0009-0002-3981-4848

Received: 23/06/2025
Accepted: 15/10/2025
Published: 31/10/2025

THE IMPACT OF INNOVATION ON THE FINANCIAL ARCHITECTURE OF THE NATIONAL ECONOMY

ABSTRACT

The modern world is undergoing rapid changes driven by innovative processes. An important aspect of these changes is the impact of innovation on the financial architecture of the national economy. The article examines the essence and significance of innovation and reviews current innovation trends in the financial sector. The financial architecture of the national economy is examined through the prism of its definition and development in Ukraine. The purpose of the article is to use a systematic approach to examine the essence of the financial architecture of the national economy and to identify the main areas of influence of innovation on it and the key factors that contribute to the effective integration of innovative processes into the financial system. The article examines in detail the effect of innovation on the banking sector, the stock market, and the insurance market. It studies the transformation of the regulatory environment under the influence of innovation. In particular, it discusses changes in legislation, as well as new approaches to the regulation of fintech companies. The digitization of all spheres of life, the introduction of remote technologies in the areas of administrative and financial services, the possibility of remote identification and verification of clients of financial institutions, and the increasing popularity of cashless payments have accelerated the transition of most financial transactions to the virtual environment. Now, every service is designed using a digital-first approach — first online, and then offline if necessary. Prospects for further implementation of innovations in the financial architecture of Ukraine are proposed. The focus is on the challenges and opportunities for the national economy. The potential risks of introducing innovations are outlined, as well as the prospects for the development of the financial sector.

Keywords: innovation, financial architecture, economics, banking sector, stock market, insurance market, fintech, AI, digitalization

JEL Classification: G10, G21, O31, O32

INTRODUCTION

In today's world of globalization and rapid technological development, innovation is becoming a key factor influencing all areas of the economy, including the financial sector. The financial architecture of national economies is constantly undergoing transformation under the influence of the latest technologies. The introduction of fintech solutions, blockchain technologies, artificial intelligence, and big data is changing traditional financial processes and creating new opportunities for growth and development. However, innovation not only contributes to the development of new technologies and products, but also changes financial institutions, markets, and mechanisms that ensure the efficiency of economic processes. The application of innovative solutions in the financial sector creates new opportunities to improve financial stability, increase competitiveness, and ensure sustainable economic growth. At a time when many countries' economies are facing challenges of economic instability and changing financial markets, it is important to understand how innovation can contribute to strengthening financial stability and competitiveness. Studying the impact of innovation on the financial architecture of the national economy allows us to identify promising areas of development, formulate effective strategies, and adapt to the challenges of the modern world.

LITERATURE REVIEW

Innovations play an important role in transforming the financial architecture of the national economy, significantly affecting all its components. Thus, in his research, Nechyporchuk M. (2023) focused on the processes of financial innovation development and the identification of the effects of their implementation, as well as the characteristics of key institutions, levels, and instruments in the regulatory architecture of national financial markets, and the identification of trends in the development of the global financial innovation ecosystem.

Tesliuk S. and Mykhalchuk B. (2023) looked at current transformation trends and strategic challenges in the field of fintech innovations that have a significant impact on the functioning of Ukraine's financial sector.

Koval N. (2024) notes that the development of banking and financial institutions on an innovative basis must be consistent with the innovative vector of economic development. The role of fintech innovations as a determining factor of the national economy was identified by Obushnyi S., Arabadzhi K., and Kostikova, K. (2023).

The financial architecture of the national economy is the subject of research by a whole cohort of researchers. In particular, Mandych O., Babko N., Andriushchenko I., and Lachkov A. (2023) note in their research that "financial architecture is the structure and design of the financial system in a country's economy".

Melnyk V. and Lomachynska I (2020) consider the financial architecture of the national economy from an institutional point of view "as a certain orderly set of institutions (rules of the game) and institutions (organizations-players) which create matrices of financial behavior that determine incentives and constraints for economic agents, which are formed within the framework of a system of coordination of relations, dictate the types of knowledge, skills, and competencies regarding the formation, distribution, and use of financial resources". Interesting is the study by Florentina Kourniasari and Elissa Dva Lestari (2025), who try to find an answer to the question: does corporate governance matter to identify the factors that affect the profitability of the insurance industry.

Zhytar M. (2019) considers the financial architecture of the economy as a certain matrix of the financial system, which consists of several components and provides for their functional interrelationships in the context of organizational, institutional, and economic relations under the influence of a dynamic external environment. At the same time, he examines financial architecture from the point of view of institutional content, as a set of certain institutions, norms, and laws that allow the formation of relationships between economic entities and contribute to the development of the financial system.

Kosova T. et al. (2020) believe that the basis of financial architecture is the organizational structure (framework, matrix) of the financial system, represented by standards, forms, and methods of regulating its institutions, structures, and organizations.

At the same time, Maliy O., Mandych O., Mykytas A., Mishchenko V., and Nagaieva G. (2023) studied the peculiarities of the innovative development of the financial architecture of business in the conditions of Industry 4.0. The researchers concluded that adaptability as a function of digital development for the financial architecture of business processes makes it possible, on the one hand, to use a diverse set of tools for adaptation in the digital space and, on the other hand, to select adaptive areas for attracting financial management and forming the appropriate financial architecture. Innovation and adaptability, when combined in the modeling of the financial system's architecture, create a platform that simultaneously provides a selection of areas, interests, and stabilization of components and role affiliation.

The Strategy for the Development of Ukraine's Financial Sector until 2025 (2020) identified key development goals in areas such as innovation, cashless economy, and financial literacy. The National Bank of Ukraine, together with the National Securities and Stock Market Commission, the Ministry of Finance of Ukraine, and the Deposit Guarantee Fund, implemented the Strategy for the Development of Ukraine's Financial Sector until 2025 over a period of 3.5 years. Despite the COVID-19 pandemic and full-scale invasion, some progress has been made. Thus, the roadmap for the implementation of the Strategy was completed by 47% (Strategy for the Development of the Financial Sector of Ukraine until 2025, Progress Report for 2022, 2023). However, the Strategy has been superseded by the adoption of a new Strategy for the Development of Ukraine's Financial Sector (2023), which focuses on combating Russian aggression and post-war Ukraine's reconstruction.

AIMS AND OBJECTIVES

The purpose of the article is to investigate the essence of the financial architecture of the national economy based on a systematic approach and to identify the main areas of influence of innovations on it and the key factors that contribute to

DOI: 10.55643/fcaptp.5.64.2025.4878

the effective integration of innovative processes into the financial system. Achieving this goal makes it possible to accomplish the following tasks:

1. To investigate the essence of innovations.
2. To review current innovation trends in the financial sector.
3. To consider the essence and development of the financial architecture of the national economy.
4. To analyze the impact of innovation on the components of financial architecture.
5. To investigate the process of transformation of the regulatory environment under the influence of innovation.
6. To identify problems and prospects for the further implementation of innovation in the financial architecture of Ukraine.

METHODS

The research process involved a set of general scientific and specialized methods, which ensured the completeness and validity of the results obtained. The observation method was used to study trends in the development of the financial sector and the processes of introducing innovations into the practice of financial institutions. This made it possible to record actual changes in the structure of the financial architecture and track the pace of their spread, the adaptation of business models, and the reaction of market participants. Analysis was used to structure the components of the financial architecture and determine the impact of innovations on each of its elements. This approach included decomposing the system into functional blocks and establishing links between them. The analysis was conducted using a combination of quantitative and qualitative tools, particularly when researching global fintech trends and technological development in Ukraine. The synthesis method ensured the generalization of results in the form of systemic conclusions, which involved the construction of interaction schemes between subsystems of the financial architecture. This made it possible not only to formalize the impact of innovations on individual elements of the architecture, but also to predict changes in the efficiency of the financial system and its competitiveness. The methods of induction and deduction were used to formulate general patterns based on the analysis of specific examples of innovation implementation, as well as to test hypotheses about their impact on financial architecture. The method of scientific abstraction made it possible to identify the essential characteristics of innovations and financial architecture. In practical terms, this involved researching the key characteristics of innovations and their impact on the components of the financial architecture of the national economy. The application of a systematic approach ensured that financial architecture was considered as a holistic entity functioning under the influence of innovative, institutional, and regulatory factors. This approach made it possible to reveal not only the static structure of its components, but also the dynamic interrelationships between them. Within the framework of systemic analysis, the financial architecture is considered as a set of interrelated subsystems (the banking sector, stock and insurance markets), each of which is both a source of influence and an object of influence of innovation. This makes it possible to identify points of synergy where innovation enhances the effectiveness of cross-sectoral interaction, as well as to analyze the characteristics of the institutional environment and regulatory requirements. Ultimately, a systemic approach makes it possible to develop balanced recommendations for the synchronous implementation of innovations and improvement of the regulatory environment, taking into account the impact of potential risks to financial stability and development.

RESULTS

An analysis of scientific sources (Nechyporchuk, 2023; Tesliuk, Mykhalchuk, 2023; Koval, 2024; Obushnyi, Arabadzhi, Kostikova, 2023) and regulatory and legal support (On Innovation Activity: Law of Ukraine on July 4, 2002) allows us to form our own vision of the definition of innovation. In our opinion, innovation should be understood as a process that includes non-standard thinking, a creative approach, the presence of an idea, its implementation in practice, which leads to the emergence of a new market, product, or service, the results of which improve the quality of life of consumers and ensure sustainable growth in financial results. It is important that the development of innovation is the driving force behind the economic growth of any country, as it creates new jobs. In addition, innovation allows us to solve more global problems, such as economic crises, climate change, hunger, and disease.

Recently, the national financial sector has been undergoing active changes due to the introduction of innovations. These changes are driven by both global trends and internal market needs. First, let us review the key innovative tendencies in Ukraine's financial sector that have been introduced by the National Bank (Figure 1).

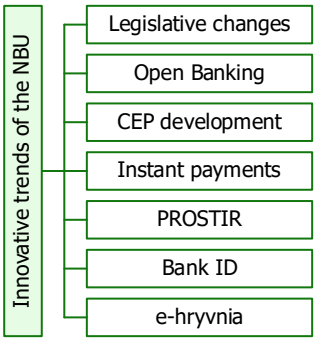

Figure 1. Key innovative trends in Ukraine's financial sector initiated by the National Bank. *(Source: compiled based on (Fintech trends 2024, 2023))*

First of all, these are changes in the legislative framework. In accordance with the requirements of the EU PSD2 directive, on August 1, 2021, the Law of Ukraine (LU) "On Payment Services" came into force, which changed the approaches to the legal regulation of the payment market, in particular, granted non-bank payment service providers the right to provide payment services without participating in payment systems, established requirements for payment systems to have at least three participants, and expanded the circle of participants in the payment market. Today, there is already a payment institution in the Ukrainian payment market that has been granted the right to open and maintain payment accounts. The NBU receives statistical data on the use of such a payment instrument as a credit transfer in Ukraine. The collection of such reports is consistent with the practices of the ECB and other leading central banks. This made it possible to assess the volume of transactions carried out in Ukraine not only using payment cards but also initiated directly from users' accounts without their use (credit and debit transfers) (Fintech trends 2024, 2023).

In addition, the Law of Ukraine "On Payment Services" also created a legislative framework for Open Banking. Open banking allows users to access a wider range of payment services and products from different providers. For example, displaying all user accounts opened at different institutions in one application, initiating payments and transfers from them, personalized financial advice, personal finance management tools, and credit products that provide more choice and individual offers. The provisions of the Law of Ukraine on Open Banking will become effective in August 2025.

The next innovative trend is the development of the NBU's Electronic Payment System. The transition to a new generation of EPS is an important technological prerequisite for the further qualitative development of Ukraine's payment infrastructure (Fintech trends 2024, 2023). In addition, as part of Ukraine's EU integration plan, preparatory work has been underway since 2023 to start the process of Ukraine's accession to the SEPA. The NBU has held consultations with the central banks of Switzerland, Belgium, Lithuania, the Czech Republic, and Poland. In 2024, the National Bank, together with banking service market participants, began working on options for technical integration with the SEPA payment infrastructure, which banks and other payment service providers will be able to use to join SEPA and offer their customers faster and cheaper payments in euros across borders (Ukrainian FinTech Catalog 2024, 2024).

The National Bank also continues to work on the introduction of instant payments in Ukraine. According to forecasts, the introduction of instant payments will have a positive impact on the level of accessibility of financial services and will contribute to the development of cashless payments in the country (Fintech trends 2024, 2023). According to the roadmap, from April 2024, participants in the electronic payment system must credit funds to accounts within an hour, and from April 2025, within ten seconds. This is one of the important tasks that Ukrainian fintech is currently working on, and its implementation will increase the speed and efficiency of business operations, which is critical for Ukraine's recovery (Ukrainian FinTech Catalog 2024, 2024). In addition, as of January 1, 2023, 10 banks have integrated the use of the NBU QR code into their applications, and some service providers and government agencies are placing QR codes on payment documents for money transfers. For more than 60% of individual bank customers who have been issued with an electronic payment card, the function of transferring funds using a QR code is available (Strategy of Ukrainian Financial Sector Development Until 2025, 2022 Progress Report, 2023).

The National Bank is also working with banks and non-bank institutions to increase the issuance of PROSTIR cards. It is important to increase payment security, so one of the tasks is to complete the configuration with the participants of the Prostir e-Secure technology (Fintech trends 2024, 2023). As of January 1, 2023, the share of banks issuing Prostir cards was 30% of the planned 70% by 2025. Ensuring the acceptance of Prostir cards in the card payment infrastructure in Ukraine at the level of: Prostir POS terminals in Ukraine — POS>99.7%, e-comm >96%, ATM>94%, P2P>92% (Strategy of Ukrainian Financial Sector Development Until 2025, 2022 Progress Report, 2023).

DOI: 10.55643/fcaptp.5.64.2025.4878

The NBU's BankID system provides citizens with a remote identification and verification tool for accessing a wide range of remote services. In particular, the system has become an important element in expanding inclusion and ensuring accessibility in the financial sector. The increase in the number of participants in the NBU's BankID system has contributed to an increase in successful identifications in the system (Ukrainian FinTech Catalog 2024, 2024). As of December 31, 2022, there were 39 participating banks in the NBU's BankID system, whose share of assets in relation to the value of all banks' assets was more than 90% (Strategy of Ukrainian Financial Sector Development Until 2025, 2022 Progress Report, 2023). In 2023, 42.9 million successful electronic identifications were carried out in the NBU's BankID System. This exceeded the 2022 figure by 31%, or 10.1 million electronic identifications. An online service was also introduced to provide information from the National Bank's Credit Register for individuals who are bank borrowers. Now, information about a user's debt can be obtained on the relevant page of the National Bank's website by using authentication through the NBU's BankID System. In order to simplify interaction with subscribers, the National Bank is introducing a new feature, namely an automated dispute resolution system, which has been available since May 2024 in the "Subscriber's Personal Account" (Ukrainian FinTech Catalog 2024, 2024).

The National Bank is also working on creating its own digital currency, the e-hryvnia. This will contribute to the digitalization of the economy, the development of non-cash payments, and enable the creation of new innovative financial products. It should be emphasized that the main purpose of the e-hryvnia is to ensure the effective performance of all functions of money, complementing cash and non-cash forms, rather than replacing them. At the same time, the e-hryvnia should be accessible to the entire population, public authorities, legal entities, banks, and non-bank financial institutions (Fintech trends 2024, 2023).

The modern world is undergoing dramatic changes caused by a variety of factors that directly affect various spheres: economic, technological, social, etc. In such circumstances, there is a growing need to strengthen the country's financial system and to create a financial architecture that would contribute to the stability of the financial sector. In particular, the Strategy for the Development of the Financial Sector of Ukraine, which was developed during the full-scale invasion of Russia and replaced the pre-war Strategy of Ukrainian Financial Sector Development until 2025, defines the Vision of the financial sector of Ukraine as follows: "The financial sector of Ukraine is sustainable, efficient, competitive, integrated into the international space, able to withstand challenges, develop and contribute to the recovery of the Ukrainian economy" (Strategy of Ukrainian Financial Sector Development, 2023).

For further analysis, we propose to interpret the financial architecture of the national economy as an orderly, multi-level system of financial institutions and agencies, as well as a set of tools and regulatory mechanisms that influence the activities of economic agents and are necessary to ensure the stability and efficiency of the financial system.

As for the components of the financial architecture of the national economy, it is advisable to distinguish the following:

1. Institutional component - formal and informal institutions that form the rules of the financial system.
2. Organizational component, which includes banking and non-banking financial institutions, financial markets, and regulatory authorities.
3. Functional component, which includes mechanisms and instruments that ensure the distribution of financial resources and stimulate economic growth.

Digitalization in the modern world and innovations affect the financial architecture of the national economy, resulting in the transformation of financial institutions, changes in their business models, the emergence of new types of financial institutions and financial instruments, changes in approaches to regulatory requirements, etc.

It is important to note that Ukraine is ranked 60th among 133 economies represented in the Global Innovation Index 2024 (Figure 2). It is well known that the assessment of the world's economic systems in terms of their innovation capabilities is carried out using the Global Innovation Index, which consists of 80 indicative indicators grouped by input and output characteristics, allowing for the coverage of multidimensional aspects of innovation (Ukraine ranking in the Global Innovation Index 2024, n.d.).

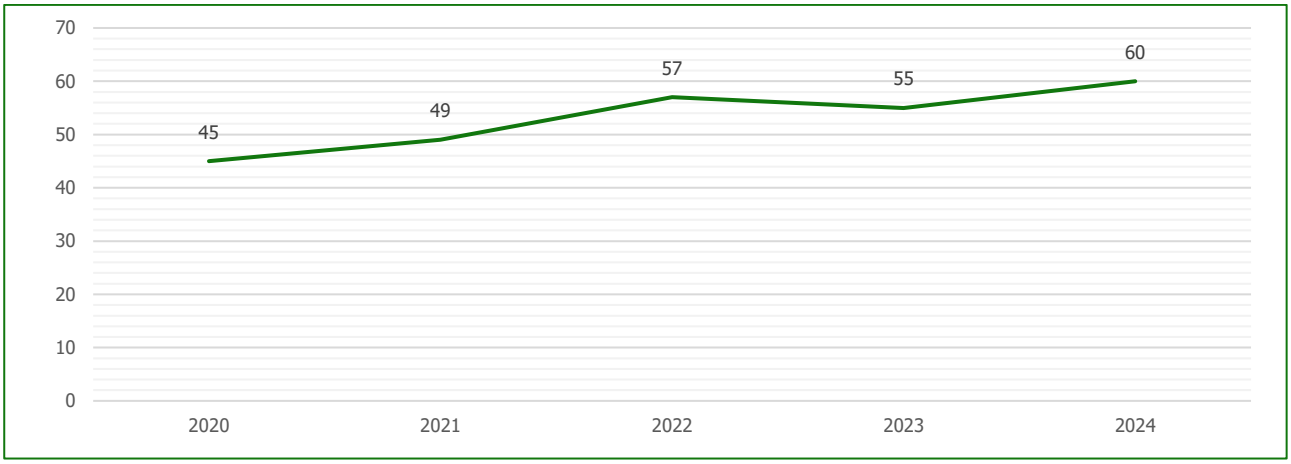

Figure 2. Ukraine's ranking by the Global Innovation Index in 2020-2024. *(Source: compiled based on (Ukraine ranking in the Global Innovation Index 2024, n.d.))*

Obviously, the impact of innovations on the financial architecture is significant and covers all its components. Let's take a closer look and analyze how innovations are transforming the banking sector, stock and insurance markets.

Thus, banking institutions are one of the key components of the financial architecture. At the same time, innovations are radically changing traditional banking activities through the introduction of digital technologies and new business models.

Digital financial services are based on the use of digital technologies for their provision and consumption. They operate through digital platforms, including mobile devices and the Internet, providing users with convenient, accessible, and secure ways to conduct financial transactions (Inclusive Digital Financial Services, n.d.). Digital financial services help reduce inequality in access to financial resources for households and businesses, while stimulating economic development (Feyen et al., 2023).

Banks are actively implementing mobile banking, which helps users remotely perform financial transactions via smartphones in real time from anywhere in the world. This contributes to greater access to banking services and, at the same time, creates convenient communication conditions.

Recently, there has been an active integration of artificial intelligence (AI) into the financial industry. In particular, among the surveyed fintech companies, 94% indicated AI as one of the promising technologies for the Ukrainian market (Ukrainian FinTech Catalog 2024, 2024). The use of AI in the work of banks allows automating routine processes and operations. This includes the use of robots and chatbots in call centers. With the help of artificial intelligence, banks can analyze customer behavior and offer them individualized financial solutions, as well as detect fraudulent transactions and assess credit risks. An analysis of Business Insider and McKinsey reports showed that almost 80% of banks are aware of the potential benefits of AI and realize that its practical application will increase productivity in the banking sector by 5% and reduce global costs by USD 300 billion. Thus, the banking and financial sectors are using AI to increase efficiency and productivity, improve services, and reduce costs. For domestic banks, the cases of the American banks Bank of America and Barclays are a good example. Back in 2018, Bank of America successfully launched the AI chatbot Erica. It provides round-the-clock customer support, efficiently processing requests and transactions, which significantly reduces waiting time and increases customer satisfaction. Barclays Bank used AI to detect fraud. Its system monitors payment transactions in real time, detecting and preventing potentially fraudulent activities, which protects customers and strengthens their trust in the bank. For example, in Ukraine, Oschadbank has introduced the Sofiya chatbot, Sense Bank uses conversational AI, as well as biometrics technology (face and voice recognition), and a modeling method to prevent operational and social engineering fraud within its contact centers. OTP Bank, FUIB, and others use AI to collect and process large amounts of data (How AI is changing Ukrainian banks, 2024).

It is worth noting that in 2024, the artificial intelligence market in the banking sector was estimated at USD 11.62 billion. According to forecasts, by 2032, it will reach USD 90.97 billion, growing at an average annual rate of 32.36% (AI In Banking Market Size and Forecast, 2024).

Blockchain technology is transforming the system of interbank settlements, making them faster and safer. API banking allows integrating banking services into various applications and platforms, creating new distribution channels. In addition,

DOI: 10.55643/fcaptp.5.64.2025.4878

biometric identification and customer authentication systems are being developed, which increases the security of transactions, which is of great importance in the context of various cyberattacks and fraud. To summarize the above, Table 1 presents the main digital technologies that are transforming the banking sector and provides a brief description of them.

Table 1. Key digital technologies transforming the banking sector. *(Source: compiled based on (Kretov, Mindova, 2024; The concept of open banking, 2023))*

Technology	Characteristics
Artificial intelligence (AI)	Allows banks to automate processes, improve risk assessment, and personalize banking services, and helps to detect fraudulent transactions
Blockchain technology	The technology ensures secure and transparent transactions. Banks are implementing blockchain for international transfers, smart contracts, and digital assets
Open banking	Provides secure data exchange between payment service providers using open APIs
Biometric authentication	The use of fingerprints, face recognition, and other biometric data increases the security and convenience of banking services. It simplifies the process of customer identification
Internet of Things (IoT)	Connected devices generate data that banks can use to better understand customer behavior and optimize financial services. IoT also opens up new opportunities for payments and financial monitoring

In recent years, neobanks - fully digital banks without physical branches that offer innovative financial products and services - have been appearing in increasing numbers. Thus, in 2022, the global neobanking market was estimated at USD 68.4 billion, and it is projected to grow by an average of more than 30% annually until 2028. Neobanks have succeeded in transforming the traditional and conservative banking sector through digital innovations and customer-centric approaches (New goals - old challenges: how neobanks live and transform the market, 2024). Thus, while at the end of 2021, 78% of business entities (2.3 million) and 63.8% of individuals (44.2 million) were served remotely, by the end of 2023, 89.2% of business entities (2.9 million) and 79.5% of individuals (62.3 million) were served remotely (Ukrainian FinTech Catalog 2024, 2024).

Updating business models and implementing digital technologies allows banks to optimize their organizational structure. Accordingly, there has been a significant reduction in the number of structural units in recent years. Thus, in Ukraine, as of January 1, 2015, there were 15082 structural units, and as of January 1, 2025, there were 5011 units (Supervisory Data, n.d.).

Thus, digital transformation is fundamentally changing the banking sector, and the introduction of innovative technologies not only helps to optimize banks' internal processes but also creates a new paradigm of banking services.

The stock market, in turn, is also undergoing changes through the prism of digital innovations. In the context of stock market globalization, attention is focused on international investment flows (Telnova et al., 2020). Every year, global stock exchanges are trying to improve their operations through the active implementation of digitalization and automation, which provides significant benefits by increasing the efficiency of processes and reducing the load on the entire system. In addition, the digitalization of the stock market has the potential to increase investment activity. After all, trading becomes more accessible, faster, and easier (Khoma, Mysko, 2023).

According to research by the international company Deloitte, the key areas of application for technology in the stock market include (The future of global securities exchanges, 2020):

1. Reducing manual operations. Automation of processes using digital technologies during registration of participants, payments, and listings.
2. Providing data on demand. Models that provide data and information will help clients make effective trading decisions and better manage their capital.
3. Reducing latency in service delivery. Minimize processing time for large volumes of transactions, including risk reports and regulatory reporting.
4. Launching digital products and services. Bringing blockchain, chatbots, etc., to the market.
5. Access to global exchanges. Companies have additional benefits, such as dual listing and expanded investor outreach.
6. Strengthening market surveillance. Digital technologies are more effective in detecting market manipulation, fraud, and compliance issues.

Digital transformation is a strategic imperative for all processes in the stock market, and the following trends are worth highlighting (Das, 2019):

1. The use of gadgets (smartphones, tablets) affects the change in clients' approaches to capital markets.
2. The use of digital technologies to increase profitability, improve operational efficiency, and develop additional high-margin products and services.
3. Application of design thinking to rethink information and customer-oriented processes.
4. Use of digitalization to improve customer experience and personalization, achieve operational flexibility, provide support to teams, and improve collaboration.
5. Introduction of cloud technologies, artificial intelligence, and machine learning, in combination with analytics and blockchain technology;
6. Growth of innovative fintech companies that use the capabilities of digital technologies to develop new products.

The transition to digital technologies in the stock market is the result of innovation. After all, innovative technologies are revolutionizing stock market trading, making it more accessible and efficient. Algorithmic trading and high-frequency trading are changing the nature of market operations, allowing thousands of transactions to be made in seconds. Robot advisors are being developed to provide automated investment recommendations based on big data analysis. Blockchain technology is being implemented to tokenize assets, making investing more accessible to small investors. New financial instruments and ESG-oriented products are emerging. Artificial intelligence is used to predict market trends and assess risks, in particular in the context of macroeconomic indicators (Kuzheliev et al., 2025; Kuzheliev et al., 2020). Mobile trading platforms are democratizing access to the stock market by allowing investments to be made via smartphone.

The insurance industry is being transformed by digitalization. One of the main innovations in the insurance sector is InsurTech, which is changing the way we assess risks and interact with customers.

InsurTech refers to innovative technologies in the insurance industry. IT innovations usually involve the following elements: AI and machine learning technologies, cybersecurity developments, big data analysis, blockchain technology, the Internet of Things, and smartphone applications (Stykhalska, 2022a).

The development of InsurTech startups stimulates innovation. Venture capital financing of the InsurTech sector is showing signs of stabilization. The third quarter of 2024 ended with investments of USD 3.2 billion, which is 7% less than in the same period of 2023. However, this decline is considered temporary. A significant share of InsurTech startup funding (43%) is for B2B Software as a Service (SaaS) startups, including those offering payment solutions, risk management, and underwriting software. Many of these companies use artificial intelligence to improve their products (Global investment and financing in the InsurTech sector will reach USD 4.2 billion in 2024, 2024).

Foreign InsurTech startups are presented in Table 2.

Table 2. Foreign InsurTech startups. *(Source: compiled based on Stykhalska, 2022a; Stykhalska, 2022b)*

Startup	Essence
Metromile	The aim of the project is to provide drivers with affordable car insurance options, where they only pay for the mileage, they drive. The software developed by Metromile allows drivers to measure distance and fuel consumption and pay for car insurance based on these indicators.
Zipari	A powerful startup supporting health insurance companies. Zipari's technologies allow collecting customer data and transforming it into data that helps insurers improve underwriting calculations and increase ROI.
Next	The startup works with corporate clients in various industries, from retail to construction, and offers small companies a digital platform that helps protect and grow their assets.
Haven Life	Applies modern open-source technologies that help potential customers take out life insurance policies online on a platform that is convenient for them. Haven Life offers risk and pension programs. Open-source technologies provide an opportunity to continuously improve the software, fix bugs, and reduce technical costs.
Corvus	Applies artificial intelligence technologies for a risk prediction platform and helps insurance brokers prevent losses and better protect contract holders' data in the information space by providing cybersecurity services.
Attestiv	A startup aimed at fighting fraud. Attestiv confirms the authenticity of photos and videos, which reduces the risks in the investigation of insurance events.
Flock	Drone insurance and safety app. Flock provides the world's most advanced real-time quantitative risk assessment of drone flights.

InsurTech startups allow insurance companies to be more flexible and quickly adapt to the challenges of the modern world.

DOI: 10.55643/fcaptp.5.64.2025.4878

The introduction of digital technologies in Ukraine has its own peculiarities, so in the context of digitalization, the main trends for the insurance sector are (Stykhalska, 2022a):

- the use of artificial intelligence to improve the efficiency of customer segmentation;
- conversion of insurance companies' products into electronic format for concluding contracts;
- widespread adoption of mobile applications for customers;
- minimization of risks for insurance companies and their customers, and data security using modern blockchain technologies;
- interaction between InsurTech startups and insurers;
- use of digital platforms to optimize insurers' business processes.

Technologies in insurance are developing rapidly, and the most popular technological solutions already used in insurance are: big data, artificial intelligence and machine learning (20%), time-based insurance ("pay as you drive") (13%), telematics (13%), insurance for the IoT sector (Internet of Things) (12%), robo-advisers and chatbots (10%), blockchain (4%). One of the vectors of innovative transformation in the insurance sector is the active use of real and augmented reality technologies to systematically control key risks (Technologies: Telematics, BigData, IoT, Artificial Intelligence, n.d.).

Thus, the impact of innovations leads to a significant transformation of the financial architecture of the national economy, increasing its efficiency, accessibility, and competitiveness. At the same time, new challenges arise in terms of regulation, cybersecurity, and consumer protection of financial services, which requires the adaptation of the organizational component of the financial architecture, namely the regulatory component.

The regulatory component of the financial architecture is represented by the system of state bodies that supervise and regulate the financial sector - the National Bank of Ukraine (NBU) and the National Securities and Stock Market Commission (NSSMC).

In Ukraine, the transformation of the regulatory environment in the fintech sector is gaining momentum, especially after the start of the active phase of the war. The NBU is systematically working to modernize financial regulation, taking into account both global trends and the specific needs of the country under martial law.

For the second time since the beginning of Russia's full-scale invasion of Ukraine, the NBU has updated its institutional Strategy focused on resisting Russian aggression and restoring the country. In particular, in response to the new conditions, the regulator updated and supplemented the list of priority measures of the NBU Strategy (NBU Strategy Update: Increasing Efficiency in Today's Changing Environment, 2025).

The war stimulated growth in demand for online financial services, which led to a need for the development of relevant technologies. As a result, the transition of financial transactions to the virtual environment requires further digitization of technological processes in the provision of administrative and financial services.

According to the NBU Strategy, measures to achieve this goal include the following (Strategy of the National Bank of Ukraine, 2025):

1. Introduction of requirements of current legislation to strengthen control measures in the areas of information security, cyber resilience of systems, and digital resilience of critical infrastructure in the financial sector, taking into account the specifics of European legislation on digital operational resilience of the financial sector (DORA).
2. Regulation of procedures for the use of cloud technologies by banking institutions and non-banks.
3. Conducting a pilot project to issue and test the NBU's e-hryvnia and deciding on the feasibility of its large-scale issuance.
4. Introducing regulation and supervision of virtual assets.
5. Strengthening the reliability, security, and availability of the banked System by bringing it in line with the requirements for medium-trust electronic identification schemes;
6. Strengthening cooperation with market participants in the development of regtech in Ukraine.
7. Implementing open banking standards.
8. Establishing updated requirements for authorized banks to store the NBU's cash.
9. Development of cash circulation infrastructure.

10. Ensuring a proportional presence of banks and non-bank financial institutions in Ukraine (including de-occupied territories and territories close to the combat zone), in particular, encouraging an increase in the number of mobile ATMs and branches in de-occupied territories.

An important step, as already mentioned, was the adoption of the Law of Ukraine "On Payment Services" in 2021, which introduced new categories of payment service providers and expanded opportunities for fintech companies. This law harmonized Ukrainian legislation with the European PSD2 directive and created the basis for the development of open banking in Ukraine.

The regulation of virtual assets has also undergone significant changes. In 2022, the Law of Ukraine "On Virtual Assets" was adopted, legalizing the cryptocurrency market and establishing a legal framework for the activities of service providers related to virtual assets. However, this law will come into force only after the Tax Code of Ukraine is amended to include provisions on taxation of transactions with digital assets.

The NBU introduced many innovative solutions to support the financial system under martial law. It has simplified remote customer identification procedures, expanded the use of electronic payment instruments, and adapted cybersecurity requirements for financial institutions.

The regulator pays special attention to the development of the NBU's BankID system, which has become a key element of the country's digital infrastructure. This system ensures reliable remote identification of citizens to receive financial and public services, which has become especially important during the pandemic and the introduction of martial law.

A risk-based approach to financial monitoring has been introduced, allowing financial institutions to apply more flexible customer verification procedures depending on the level of risk. This promotes a balance between financial system security and service availability.

In 2023, the NBU launched a regulatory platform ("sandbox") to test innovative products, services, technologies, and tools. The regulatory platform allows authorized financial or payment service providers to test new modern and innovative financial and payment products in real market conditions in a limited environment and under the supervision of the regulator (NBU Launches Regulatory Sandbox to Test Innovative Products, 2023).

The development of cashless and digital payments remains an important area. The NBU encourages the introduction of innovative payment solutions, including instant payments and contactless technologies, which contribute to the further digitalization of Ukraine's economy.

The regulatory environment is also adapting to the requirements of European integration. As part of the implementation of the Association Agreement with the EU, Ukrainian legislation is being harmonized with European standards in the field of financial services and consumer protection.

However, summarizing the above, it should be noted that certain challenges remain, including the need to further improve the mechanisms for protecting the rights of financial services consumers, develop the regulation of new financial instruments, and ensure effective supervision of fintech companies in the context of rapid technological development and martial law in the country.

According to analysts' forecasts, in the next ten years, almost 70% of the value created will belong to digital products. In 2018, the share of global GDP attributable to digitalized enterprises was USD 13.5 trillion, while in 2023 this figure increased fourfold to USD 53.3 trillion (Figure 3).

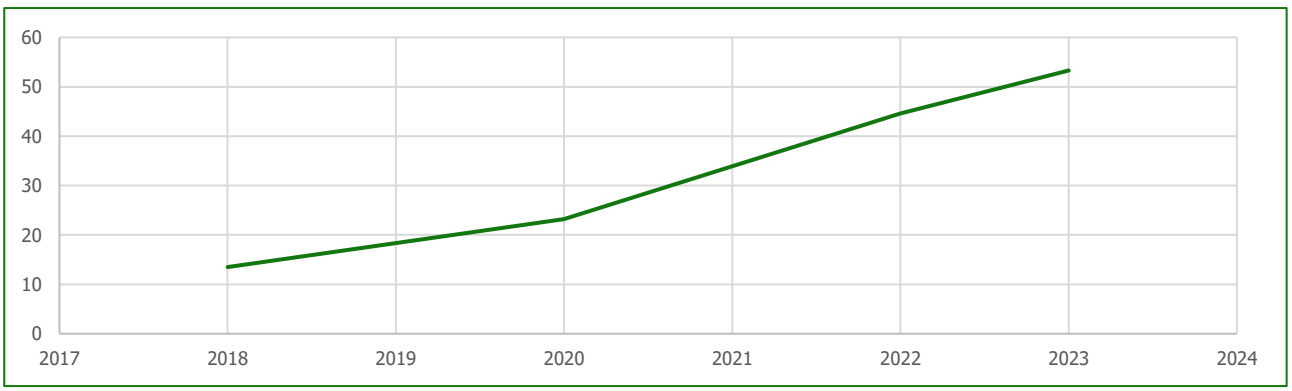

Figure 3. Digital enterprises in the global GDP, USD trillion. *(Source: compiled based on (Krupianyk, 2024))*

DOI: 10.55643/fcaptp.5.64.2025.4878

The digital economy is considered to be more resistant to crises, quarantines, or wars. Even after the start of a full-scale invasion, the Ukrainian IT industry became one of the most stable sectors of the economy. At the same time, it is the only industry whose exports grew in 2022. In addition, it is a reliable source of tax revenue. Information technology can significantly increase the efficiency of the future post-war reconstruction process. This refers not only to the development of the IT sector and the application of digital technologies in other industries to increase production efficiency, but also to digital solutions for the distribution of international aid and control over its use, which will help reduce corruption risks.

After analyzing global fintech trends and the size of the global market until 2030, it should be noted that the five most popular trends include: digital payments, e-commerce, neobanks/SuperApps, KYC/ALM, and AI (Figure 4).

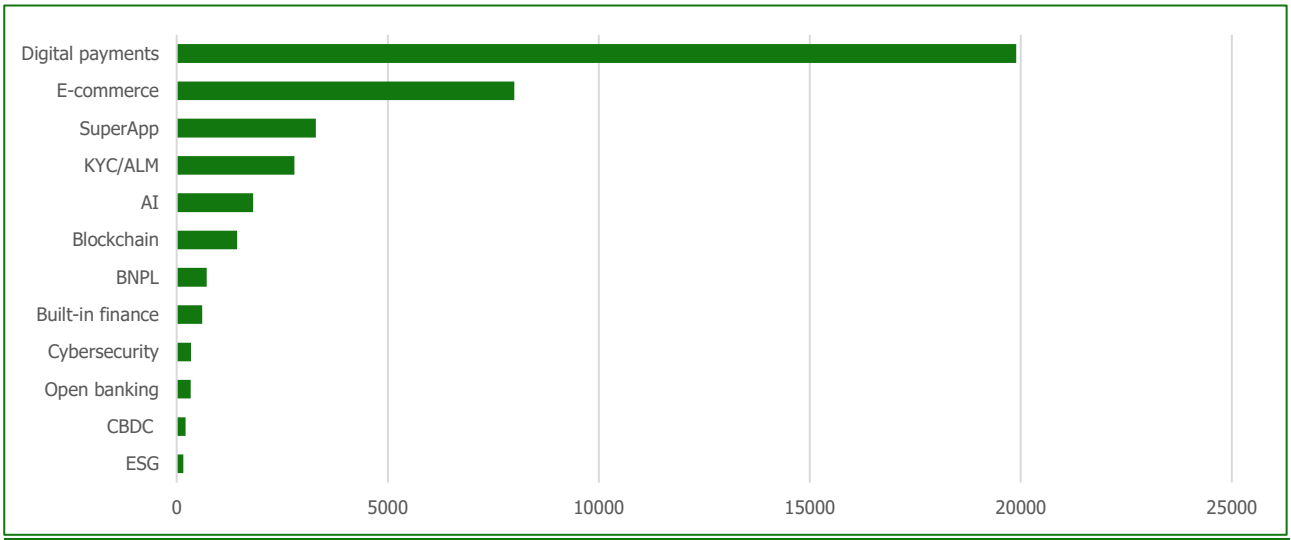

Figure 4. Global fintech trends. *(Source: compiled based on (Fintech trends 2024, 2023))*

At the same time, the top five most promising areas of development for the financial technology sector in Ukraine over the next two years will be AI, military technology, open banking, cybersecurity, and digital lending (Figure 5). AI, KYC/ALM, and open banking will have the greatest impact on the financial sector in 2025.

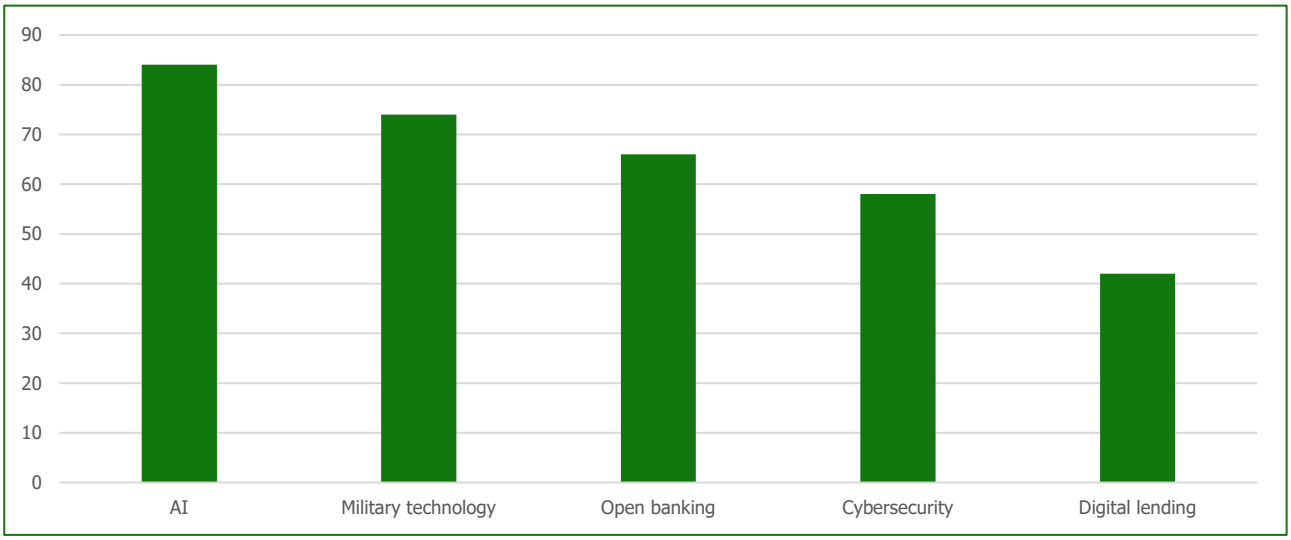

Figure 5. Top 5 most promising areas of development for the financial technology sector in Ukraine. *(Source: compiled based on (Fintech trends 2024, 2023))*

In addition to the above-mentioned prospects for introducing innovations into Ukraine's financial architecture, there are certain risks. There is a perception that a certain part of the population cannot use most electronic services, such as Diya, Helsi, electronic banking, etc. Thus, there is digital inequality that requires the government's attention (Krupianyk, 2024). However, the study found that Ukraine rose from 102nd place to fifth place in the Online Services Index ranking in 2024. At the same time, Ukraine ranked first in terms of E-Participation, which assesses the readiness of Ukrainians to participate

in government processes through online platforms. Digitalization has already become an integral part of Ukrainians' lives — the Diya app has almost 21 million users, who have access to 21 documents, over 30 services, and 100+ government services for citizens and businesses (Prasad, 2024). eSupport, eRecovery, eHome, military bonds, and deposit refunds in Diya are powerful projects that have resulted from effective cooperation between the state and banks to offer Ukrainians a convenient and modern service. Such revolutionary Diia services as document sharing and Diia.Signature helps businesses speed up service and simplify online interaction with customers. In total, 48 banks have implemented document sharing and Diia.Signature in their work. Work is also underway with the NBU to launch multi-sharing, a service that will allow users to obtain copies and data not only of digital documents but also of income statements, OK-5, and OK-7 forms in just a few clicks with a single request through Diia. This will make sharing comprehensive and significantly save time for both bank employees and customers (Ukrainian FinTech Catalog 2024, 2024).

Fintech is developing, and Ukraine is becoming a technologically advanced country. According to 47% of the experts surveyed, Ukraine is a highly developed technological country, and 53% said that the level of technological development is rather average (Figure 6).

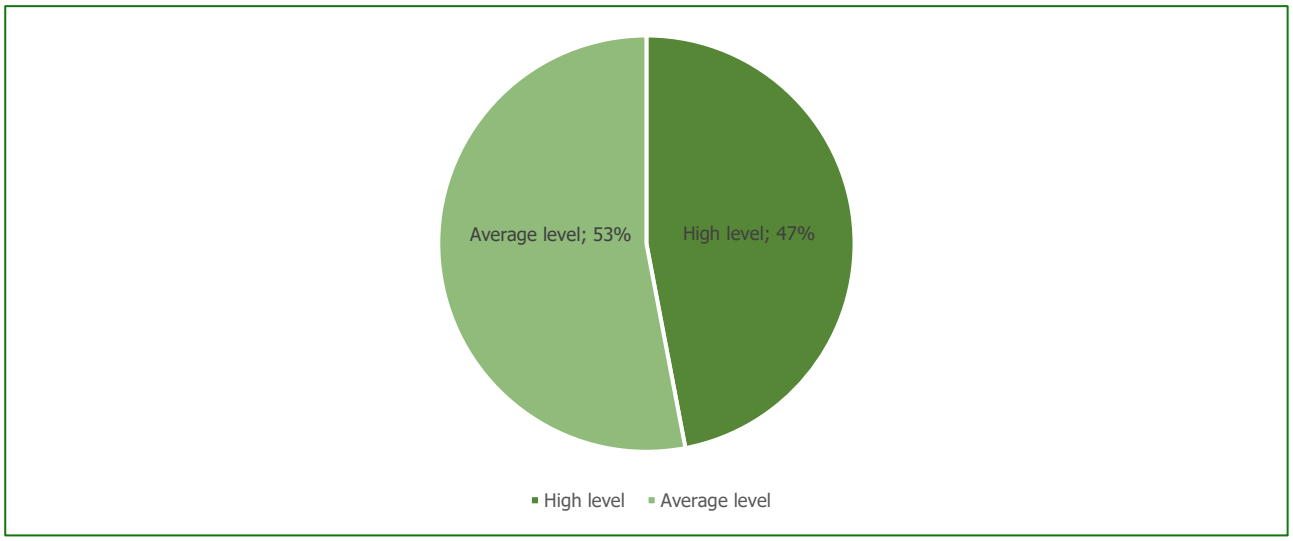

Figure 6. Level of technological development in Ukraine. *(Source: compiled based on (Fintech trends 2024, 2023))*

Along with the successful implementation of innovations in Ukraine's financial architecture, challenges such as legislative regulation, cybersecurity, and financial inclusion should also be considered. Domestic legislation is not yet sufficiently adapted to new technologies and innovations. For example, there is currently no legislative framework for regulating the functioning of crowdfunding platforms (Strategy of Ukrainian Financial Sector Development Until 2025, 2022 Progress Report, 2023).

Financial systems require enhanced protection against possible cyberattacks through the introduction of new security technologies. The indicators "Ensuring regulatory control of cyber protection and information security in the financial sector" and "Introducing specialized control over compliance with cyber protection and information security requirements" are at 50% and 55% of the planned 80% by 2025, respectively. The number of qualified electronic signature certificates issued to customers of qualified electronic trust service providers in the financial sector is 7.1 million in 2023, out of a planned 9 million by 2025. The National Cyber Security Index was 24 in 2023, while by 2025 it should decrease to 22 (Strategy of Ukrainian Financial Sector Development Until 2025, 2022 Progress Report, 2023).

Analysis of the Strategy indicators for the "Financial Inclusion" objectives shows that some indicators have exceeded the planned values, in particular, the number of basic accounts opened in relation to the adult population by 4% and the ratio of non-cash card transactions (including P2P) to the total volume of transactions by 3%. The level of public confidence in the financial system in 2023 is 37.7%. This value exceeds the 2022 indicator by 12.7% but still lags behind the planned value by 22.3%. The ratio of cash to GDP in 2023 was 12.8%, which exceeds the planned indicator by 5.3%. The financial literacy index of the population (on a scale from 0 to 21) is 12.3% (Strategy of Ukrainian Financial Sector Development Until 2025, 2022 Progress Report, 2023). A number of measures need to be taken to ensure the successful development of innovation in Ukraine's financial sector. In particular, it is necessary to organize cooperation between the state, business, and scientific institutions to create a favorable ecosystem for innovation. Increase state funding and attract foreign investment in research and development, as well as support scientific research in the field of financial technologies. Train highly

DOI: 10.55643/fcaptp.5.64.2025.4878

qualified specialists in the field of finance and technology. Start with the dissemination of financial literacy measures, and then update educational programs in higher education institutions to meet market requirements. At the same time, the survey of respondents showed that the biggest obstacle to the development and realization of innovations in finance is war.

DISCUSSION

In modern scientific research, the impact of innovation on the financial architecture of the national economy is considered from different perspectives, which creates ample room for discussion. Thus, there is no consensus on the interpretation of the essence of financial innovations. Some authors focus on the technological aspect, emphasizing the growing role of fintech solutions in the transformation of the financial system (Obushnyi et al., 2023). Other researchers draw attention to the institutional dimension, emphasizing that innovations change not only the instruments but also the very structure of the financial architecture (Zhytar, 2019; Mandych et al., 2023).

The scale and speed of innovative changes also remain a matter of debate. Some researchers (Viblyi et al., 2022) point to the accelerated introduction of FinTech services in the context of war and digitalization, which is radically affecting the activities of banks and non-bank institutions. At the same time, other scholars (Melnyk et al., 2020) emphasize that, despite the intensification of financial technologies, traditional financial institutions remain the foundation of the national architecture and the transformation process is gradual.

The discussion regarding the regulatory environment is also relevant. Research by Nechyporchuk M. (2023) emphasizes the need to form a new institutional and regulatory architecture capable of adapting to the challenges of digitalization and globalization.

Based on the results of the research conducted by the aforementioned scholars, it is worth focusing on the following points.

Excessive regulation by state institutions can hinder innovation and the development of the fintech sector. At the same time, insufficient control creates risks for financial stability and consumer protection. Therefore, finding a balance between these conflicting requirements is one of the key tasks in implementing the national strategy.

An important issue is the readiness of the national financial system for technological change. This concerns both the technical infrastructure and regulatory framework, as well as the level of digital literacy among the population. In our opinion, the successful digital transformation of the financial architecture in Ukraine requires a comprehensive and systematic approach and coordination of efforts by all stakeholders.

CONCLUSIONS

Summarizing the results of the research, it is worth noting that innovation is an important factor in economic development, transforming the financial architecture through digitalization, the spread of fintech solutions, blockchain, artificial intelligence, etc. A review of current innovation trends in the financial sector has shown the active introduction of digital technologies. Such innovations provide faster access to financial services, optimize business processes, and open up new opportunities for increasing financial inclusion. For example, the use of AI in the financial sector, particularly in banking, allows for the analysis of customer financial behavior, the prediction of financial risks, the detection of fraudulent activities, the assessment of customer creditworthiness, the improvement of internal audit processes, the enhancement of 24/7 customer service through chatbots, optimizing business processes, and automating routine tasks. Smart contracts, which use blockchain to automate contract execution, have become increasingly popular. They have the potential to simplify and accelerate financial transactions. Such innovations have the potential to radically transform the financial industry. They can make financial services more accessible, efficient, and transparent. However, it is important that these innovations are developed and implemented responsibly to avoid potential risks such as fraud and financial instability.

An examination of the essence and development of the financial architecture of the national economy has shown that it is a dynamic system of financial institutions and agencies, instruments, and regulatory mechanisms. Financial architecture determines the level of competitiveness of the national economy and its ability to ensure economic growth. In the current environment, Ukraine's financial architecture is developing under the influence of innovative digital technologies, which is particularly evident in the banking sector, stock and insurance markets, where the introduction of fintech solutions is quite

active. At the same time, in the context of the digitalisation of economic relations, the ability of the financial architecture to adapt to existing challenges is of particular importance.

Research into the process of transforming the regulatory environment has shown the need to strengthen the adaptability and flexibility of the regulatory framework. Regulators must respond to new challenges related to cyber risks, personal data protection, and the emergence of new financial products, while ensuring the stability and competitiveness of the financial sector.

Identifying the problems and prospects for further innovation in Ukraine's financial architecture has made it possible to establish key challenges, such as low digital literacy and cybersecurity threats. The prospects include deepening financial inclusion, increasing transparency, expanding the use of fintech solutions, and mobilizing financial resources for post-war reconstruction and sustainable development of the national economy.

Therefore, the future of Ukraine's financial sector is linked to innovation. Despite the challenges posed by the full-scale invasion, the financial sector has adapted quickly and demonstrated resilience and potential for growth. We believe that the active introduction of new technologies will increase the efficiency of financial services, make them more accessible and convenient for users, contribute to economic development, and ensure the stability and growth of financial revenues necessary for Ukraine's post-war reconstruction.

Prospects for further research concern the development of theoretical and methodological approaches to the transformation of financial institutions under the influence of innovation and the assessment of the consequences of digitalization for the stability of the financial system. Particular attention should be paid to researching the risks associated with cyber threats and regulatory challenges, as well as finding effective mechanisms to ensure financial inclusion.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

All authors have contributed equally.

FUNDING

The Authors received no funding for this research.

CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

REFERENCES

1. AI In Banking Market Size and Forecast (2024). Verified Market Research. https://www.verifiedmarketresearch.com/product/ai-in-banking-market/
2. Das, S. (2019). Digital transformation in securities and capital markets. WIPRO. https://www.wipro.com/capital-markets/digital-transformation-in-securities-and-capital-markets/
3. Feyen, Erik H.B., Natarajan, H., & Saal, M. (2023). Fintech and the Future of Finance: Market and Policy Implications. Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/099450005162250110
4. Fintech trends 2024. (2023). The Ukrainian Association of FinTech and Innovation Companies. https://fintechua.org/fintech-trends-2024
5. Global investment and financing in the InsurTech sector will reach USD 4.2 billion in 2024. (2024). FORINSURER. https://forinsurer.com/news/24/11/11/44380
6. How AI is changing Ukrainian banks. (2024). FinTech Insider. https://fintechinsider.com.ua/yak-shi-zminyuye-ukrayinski-banky/
7. Inclusive Digital Financial Services (n.d.). World Bank Group. https://digitalfinance.worldbank.org/topics/dfs-overview
8. Khoma, I., & Mysko, Y. (2023). The impact of virtualization on the global stock market. *Economy and Society, 57*. https://doi.org/10.32782/2524-0072/2023-57-102
9. Kosova, T., Dyeyeva, N., & Polzikova, H. (2020). Financial architecture as the basis for the development of the national economy management. *Ekonomika ta derzhava, 8*, 49–52. https://doi.org/10.32702/2306-6806.2020.8.49

DOI: 10.55643/fcaptp.5.64.2025.4878

10. Koval, N. (2024). Innovative principles of development in the context of the financial and banking sector. *Economy and Society, 61*. https://doi.org/10.32782/2524-0072/2024-61-113

11. Kretov, D., & Mindova, O. (2024). Digitalization of the banking sector of ukraine: current state and development prospects. *Sustainable Development of Economy, 2*(49), 223-228. https://doi.org/10.32782/2308-1988/2024-49-35

12. Krupianyk, A. (2024). Digital Economy of Ukraine: Key Development Factors. Vox Ukraine. https://voxukraine.org/tsyfrova-ekonomika-ukrayiny-osnovni-faktory-rozvytku

13. Kurniasari, F., Dwi Lestari, E. (2025). Does corporate governance matter in elucidating factors that drive profitability in the insurance industry? *Insurance Markets and Companies, 16*(1), 90-102. https://doi.org/10.21511/ins.16(1).2025.08

14. Kuzheliev, M., Zherlitsyn, D., Rekunenko, I., Nechyporenko, A., & Stabias, S. (2025). Expanding portfolio diversification through cluster analysis beyond traditional volatility. *Investment Management and Financial Innovations, 22*(1), 147-159. http://dx.doi.org/10.21511/imfi.22(1).2025.12

15. Kuzheliev, M., Zherlitsyn, D., Rekunenko, I., Nechyporenko, A., & Nemsadze, G. (2020). The impact of inflation targeting on macroeconomic indicators in Ukraine. *Banks and Bank Systems, 15*(2), 94-104. http://dx.doi.org/10.21511/bbs.15(2).2020.09

16. Maliy, O. G., Mandych, O. V., Mykytas, A. V., Mishchenko, V. S., & Nagaieva, G. O. (2023). Financial architecture of business: features of innovative development in the conditions of Industry 4.0. In: Commercialization of innovations in the conditions of Industry 4.0: a monograph. Sumy: Sumy State University, 360–366. https://repo.btu.kharkiv.ua/items/095c7386-ad6b-4674-b6c2-0abdca12cd06

17. Mandych, O., Babko, N., Andriushchenko, I., & Lachkov, A. (2023). Financial architecture: main components, comparative analysis, and current challenges. *Ukrainian Journal of Applied Economics and Technology, 1*(8), 208–212. https://doi.org/10.36887/2415-8453-2023-1-30

18. Melnyk, V., & Lomachynska, I (2020). Financial architecture of national economy: institutional approach. *Scientific Bulletin of Uzhhorod National University, 34*, 156–162. http://www.visnyk-econom.uzhnu.uz.ua/archive/34_2020ua/28.pdf

19. NBU Launches Regulatory Sandbox to Test Innovative Products. (2023). National Bank of Ukraine. https://bank.gov.ua/ua/news/all/natsionalniy-bank-zapuskaye-regulyatornu-platformu-dlya-testuvannya-innovatsiynih-produktiv

20. NBU Strategy Update: Increasing Efficiency in Today's Changing Environment. (2025). National Bank of Ukraine. https://bank.gov.ua/ua/news/all/onovlennya-strategiyi-nbu--pidvischennya-efektivnosti-v-umovah-minlivogo-sogodennya

21. Nechyporchuk, M. (2023). Institutional and regulatory architecture of the global ecosystem of financial innovations. *International Economic Policy, 2*(39), 121–143. http://iepjournal.com/journals/39/2023_39_6_Nechyporchuk.pdf

22. New goals - old challenges: how neobanks live and transform the market. (2024). FinTech Insider. https://fintechinsider.com.ua/novi-czili-stari-vyklyky-chym-zhyvut-ta-yak-transformuyut-rynok-neobanky/

23. Obushnyi, S., Arabadzhi, K., & Kostikova, K. (2023). Financial technologies in Ukraine: the way to innovation and sustainability. *European scientific journal of Economic and Financial innovation, 11*(1), 59–72. http://doi.org/10.32750/2023-0105

24. On Innovation Activity: Law of Ukraine on July 4, 2002. No. 40-IV. Bulletin of the Verkhovna Rada of Ukraine. http://zakon2.rada.gov.ua/laws/show/40-15

25. On Payment Services: Law of Ukraine on June 30, 2021. No. 1591-IX. Bulletin of the Verkhovna Rada of Ukraine. https://zakon.rada.gov.ua/laws/show/1591-20#Text

26. Prasad, A. (2024). Ukraine became the fifth in the world in terms of digital public services development. *Forbes.* https://forbes.ua/news/ukraina-stala-pyatoyu-u-sviti-za-rivnem-rozvitku-tsifrovikh-derzhposlug-20092024-23743

27. Strategy of the National Bank of Ukraine (2025). National Bank of Ukraine. https://bank.gov.ua/admin_uploads/article/Strategy_NBU.pdf?v=9

28. Strategy of Ukrainian Financial Sector Development Until 2025, 2022 Progress Report. (2023). National Bank of Ukraine. https://bank.gov.ua/ua/news/all/zvit-z-realizatsiyi-strategiyi-rozvitku-finansovogo-sektoru-ukrayini-do-2025-roku-za-2022-rik

29. Strategy of Ukrainian Financial Sector Development until 2025. (2020). National Bank of Ukraine. https://bank.gov.ua/ua/files/DDWIAwXTdqjdClp

30. Strategy of Ukrainian Financial Sector Development. (2023). National Bank of Ukraine. https://bank.gov.ua/ua/news/all/strategiya-rozvitku-finansovogo-sektoru-ukrayini

31. Stykhalska, N. (2022a). How InsurTech is changing the insurance market. https://taslife.com.ua/blog/yak-insurtech-zminyuye-rynok-strahuvannya

32. Stykhalska, N. (2022b). How InsurTech is changing the insurance market? Part 2. https://taslife.com.ua/blog/yak-insurtech-zminyuye-rynok-strahuvannya-chastyna-druga

33. Supervisory Data (n.d.). National Bank of Ukraine. https://bank.gov.ua/ua/statistic/supervision-statist

34. Technologies: Telematics, BigData, IoT, Artificial Intelligence. (n.d.) FORINSURER. https://forinsurer.com/theme/77

35. Telnova, H., Kolodiziev, O., Krupka, I., & Boiko, N. (2020). Foreign Direct Investment in the Eurozone Countries: Stochasticity of the Financial Influence Factors. *Financial and credit activity: problems of theory and practice, 4*(35), 107–120. https://doi.org/10.18371/fcaptp.v4i35.221826

36. Tesliuk, S., & Mykhalchuk, B. (2023). Impact of transformation trends and strategic challenges in the field of fintech innovations on the financial sector of Ukraine. *Economic Journal of Lesya Ukrainka Volyn National University, 3*(35), 61–67. https://doi.org/10.29038/2786-4618-2023-03-61-67

37. The concept of open banking. (2023). National Bank of Ukraine. https://bank.gov.ua/admin_uploads/article/Open_banking_conception_NBU_2023.pdf

38. The future of global securities exchanges. Amplifying the impact of digital transformation in capital markets (2020). Deloitte. https://www.deloitte.com/global/en/Industries/financial-services/perspectives/gx-future-of-global-securities-exchanges.html

39. Ukraine ranking in the Global Innovation Index 2024. (n.d.). WIPO. https://www.wipo.int/gii-ranking/en/ukraine

40. Ukrainian FinTech Catalog 2024. (2024). The Ukrainian Association of FinTech and Innovation Companies. https://fintechua.org/download_catalog2024

41. Viblyi, P., & Kondratiuk, M. (2022). Development of financial technologies in Ukraine under war conditions. *Galician economic journal, 3*(76), 67-73. https://doi.org/10.33108/galicianvisnyk_tntu2022.03.067

42. Zhytar, M. O. (2019). The Financial Architecture of the National Economy: Configuration and Structural Components. *The Problems of Economy, 3*, 194–201. https://doi.org/10.32983/2222-0712-2019-3-194-201

Кужелєв М., Нечипоренко А., Сулима М., Овчарук С., Леонтьєва М.

ВПЛИВ ІННОВАЦІЙ НА ФІНАНСОВУ АРХІТЕКТУРУ НАЦІОНАЛЬНОЇ ЕКОНОМІКИ

Сучасний світ переживає стрімкі зміни, які зумовлені інноваційними процесами. Важливим аспектом цих змін є вплив інновацій на фінансову архітектуру національної економіки. У статті розглянуто сутність і значення інновацій, проведено огляд сучасних інноваційних трендів у фінансовому секторі. Фінансова архітектура національної економіки досліджена крізь призму визначення й розвитку в Україні. Мета дослідження: на основі системного підходу вивчити сутність фінансової архітектури національної економіки та визначити основні напрями впливу на неї інновацій і ключові фактори, що сприяють ефективній інтеграції інноваційних процесів до фінансової системи. У статті детально досліджено вплив інновацій на банківський сектор, фондовий ринок і страховий ринок. Вивчено трансформації регуляторного середовища під впливом інновацій. Зокрема йдеться про зміни в законодавстві, а також про нові підходи до регулювання фінтех-компаній. Цифровізація всіх царин життя, упровадження віддалених технологій у царині адміністративних і фінансових послуг, можливість здійснення дистанційної ідентифікації й верифікації клієнтів фінансових установ, збільшення популярності безготівкових розрахунків прискорили перехід більшості фінансових операцій у віртуальне середовище. Тепер кожна послуга проєктується за підходом digital first — спершу онлайн, а вже потім за потреби з'являється офлайн. Запропоновано перспективи подальшого впровадження інновацій у фінансову архітектуру України. Зосереджено увагу на викликах і можливостях для національної економіки. Названо потенційні ризики впровадження інновацій, а також перспективи розвитку фінансового сектора.

Ключові слова: інновації, фінансова архітектура, економіка, банківський сектор, фондовий ринок, страховий ринок, фінтех, ШІ, цифровізація

JEL Класифікація: G10, G21, O31, O32

DOI: 10.55643/fcaptp.5.64.2025.4878