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**DIGITALIZATION OF INTERNATIONAL FINANCIAL MARKETS AS A
FACTOR IN THE MODERNIZATION OF CAPITAL MOVEMENT IN THE
GLOBAL ECONOMY**

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ЦИФРОВІЗАЦІЯ МІЖНАРОДНИХ ФІНАНСОВИХ РИНКІВ ЯК ФАКТОР МОДЕРНІЗАЦІЇ РУХУ КАПІТАЛУ В СВІТОВІЙ ЕКОНОМІЦІ

Under the conditions of the ongoing deepening of globalization in the world economy, driven by technological progress, the processes of its digitalization have become the most significant factor in the transformation of financial systems and the structures of the international capital market. In this context, the purpose of this article is to identify and provide a systematic description of the specific features of the digitalization of international financial markets, which are considered as a factor in the modernization of capital flows in the global economy. Within the framework of the study, it has been established that the digitalization of international financial markets is shaping a new type of capital flow—decentralized, digital, and highly technologically integrated—characterized by speed, maximum security, efficiency, openness, and regulation. Moreover, attention is drawn to the fact that the systematic manifestation of these features contributes to deeper financial integration, expanded access to resources, greater transparency in the movement of funds, investments, securities, and credits between countries, industries, and enterprises, as well as to the formation of a more resilient and flexible financial system. The results of the study also demonstrate that the digital transformation of international capital markets serves not only as a tool for modernizing global financial flows but also as a key factor in enhancing the

competitiveness of national economies within the global financial space. It has been established that the digital transformation of international financial markets modernizes capital movement through: the transition of transactions to real-time mode enabled by digital platforms and blockchain technologies; the reduction of transaction costs, minimization of human errors and fraud risks; and the creation of new channels for capital movement that facilitate investment and lending beyond traditional financial intermediaries, as well as the real-time monitoring of operations. It has been established that the digitalization of international financial markets enhances the competitiveness of national economies through broader access to financial resources, reduction of intermediary costs and administrative barriers, integration into global financial flows, and the stimulation of innovation and financial flexibility.

В умовах поглиблення глобалізації світової економіки, спричиненої технологічним прогресом, процеси її цифровізації виступають одним із найважливіших чинників трансформації фінансових систем і структур міжнародного ринку капіталу. Відтак метою статті є визначення та системний опис особливостей цифровізації міжнародних фінансових ринків, які розглядаються як ключовий фактор модернізації руху капіталу у світовій економіці. У межах дослідження констатовано, що цифровізація міжнародних фінансових ринків формує новий тип руху капіталу — децентралізований, цифровий і високотехнологічно інтегрований, який характеризується швидкістю, максимальною безпечністю, ефективністю, відкритістю та регульованістю. Крім того звернено увагу на той факт, що системний прояв цих ознак сприяє поглибленню фінансової інтеграції, розширенню доступу до ресурсів, підвищенню прозорості переміщення грошових коштів, інвестицій, цінних паперів, кредитів між країнами, галузями або підприємствами та формуванню більш стійкої й гнучкої фінансової системи. За результатами дослідження також доведено, що цифрова трансформація міжнародних ринків капіталу виступає не лише інструментом модернізації глобальних фінансових потоків, а й ключовим

чинником підвищення конкурентоспроможності національних економік у світовому фінансовому просторі. Констатовано, що цифрова трансформація міжнародних фінансових ринків модернізує рух капіталу через: переміщення транзакцій в режим реального часу; зменшення транзакційних витрат, мінімізацію людських помилок та ризиків шахрайства; відкриття нових каналів руху капіталу, що забезпечують інвестування та кредитування поза традиційними фінансовими посередницькими структурами; оперативне відстеження операцій. Констатовано, що цифровізація міжнародних фінансових ринків сприяє підвищенню конкурентоспроможності національних економік через: ширший їх доступ до фінансових ресурсів; зменшення посередницьких витрат і адміністративних перепон, інтеграцію у світові фінансові потоки; стимулювання інновацій та фінансової гнучкості.

Keywords: *financial flows; operational monitoring of transactions; international financial markets; capital market participants; fintech solutions; capital movement.*

Ключові слова: *фінансові потоки; оперативне відстеження операцій; міжнародні фінансові ринки; учасники ринку капіталу; фінтех-рішення; рух капіталу.*

Problem statement. In the context of the ongoing deepening of globalization in the world economy, driven by technological progress, its digitalization processes are the most significant factor transforming financial systems and the structures of the international capital market. In particular, the development of digital technologies—such as blockchain, artificial intelligence, big data, fintech solutions, and electronic payment systems—has led to fundamental changes in the ways financial resources are accumulated, redistributed, and transferred between countries. In the field of capital accumulation, digital technologies facilitate the development of new forms of investment, including crowdfunding, crowdinvesting, asset tokenization, and the

issuance of digital bonds, enabling the mobilization of resources without the intermediation of traditional financial institutions.

In the process of redistributing financial resources, there is a shift from centralized banking structures to decentralized platforms (DeFi), which provide access to lending, currency exchange, and asset management through the use of smart contracts. Regarding capital flows between countries, digitalization contributes to lower transaction costs, faster international settlements, and increased transparency of transactions through the use of blockchain technologies and electronic payment systems. These processes enhance the transparency, speed, and efficiency of financial operations while simultaneously creating new challenges for the regulation, security, and stability of global financial flows.

The digital transformation of financial markets is driving the development of a new architecture for international capital flows, in which decentralized financial instruments (DeFi), central bank digital currencies (CBDCs), and crowdfunding platforms are playing an increasingly significant role. At the same time, the interdependence of national economies is increasing, necessitating the adaptation of mechanisms for both national and supranational regulation of capital flows.

Analysis of research and publications. The issues of international financial market development and the impact of the aforementioned processes on capital flows in the global economy have been examined in the works of Havryliuk I. [4], Bondar Y. M. [3], and Khomutenko L. I. [6]. In particular, these scholars studied the features of international financial market functioning under globalization, as well as trends in the integration of financial flows. Alt R., Beck R., and Smits M. T. [1] analyzed the characteristics and direction of the impact of financial liberalization on cross-border capital movement.

At the same time, the issue of defining the specifics of the digitalization of international financial markets as a factor in modernizing capital flows in the global economy has not yet been sufficiently addressed in the literature. The limited coverage of digitalization issues in international financial markets creates a number of systemic challenges that constrain the ability to conduct a comprehensive

analysis of the impact of digital technologies on the structure and dynamics of international capital flows. The most problematic aspect is the lack of an integrated theoretical and methodological framework, which complicates the development of a coherent conceptual apparatus regarding digital financial instruments, blockchain technologies, crypto-assets, and fintech innovations.

Therefore, the study of the digitalization of international financial markets as a factor in modernizing capital flows in the global economy is both relevant and timely.

Formulation of the article's objectives. The aim of this article is to identify and systematically describe the specifics of digitalizing international financial markets, which is considered a factor in modernizing capital flows in the global economy.

The paper main body. The digitalization of international financial markets refers to the process of implementing and systematically utilizing digital technologies in the operations of global financial institutions, exchanges, banks, investment funds, and other capital market participants. It enables the transition to electronic forms of trading financial assets, the application of fintech solutions, artificial intelligence, blockchain technologies, big data systems, as well as digital currencies and decentralized financial platforms (DeFi).

It should be noted that, based on the above, digitalization serves as a factor in modernizing capital flows in the global economy [3-4]:

1. Increased speed and efficiency of financial flows through digital platforms, enabling instant transactions. This reduces time lags in cross-border capital movement, accelerates investment processes, and expedites international settlements.
2. Reduced transaction costs through the use of blockchain, smart contracts, and fintech services. This lowers the need for financial intermediaries, reduces fees, and simplifies access to financial resources.
3. Enhanced financial accessibility via digital services. This expands access to global markets for both businesses and individual investors.

4. Improved transparency and security of financial operations through digital technologies that record all transactions in distributed ledgers. This minimizes fraud risks and allows for more effective monitoring of capital flows.
5. The emergence of tokenized assets, cryptocurrencies, digital bonds, and central bank digital currencies (CBDCs) is creating new forms of capital and financial instruments, transforming the traditional mechanisms of capital formation and circulation.

Digitalization, given the characteristics described, acts as a modernizing factor, reshaping the institutional, technological, and organizational foundations of international financial markets and making capital flows faster, more flexible, accessible, and globally controllable [1]. A systematic overview of these specifics is shown in Figure 1.

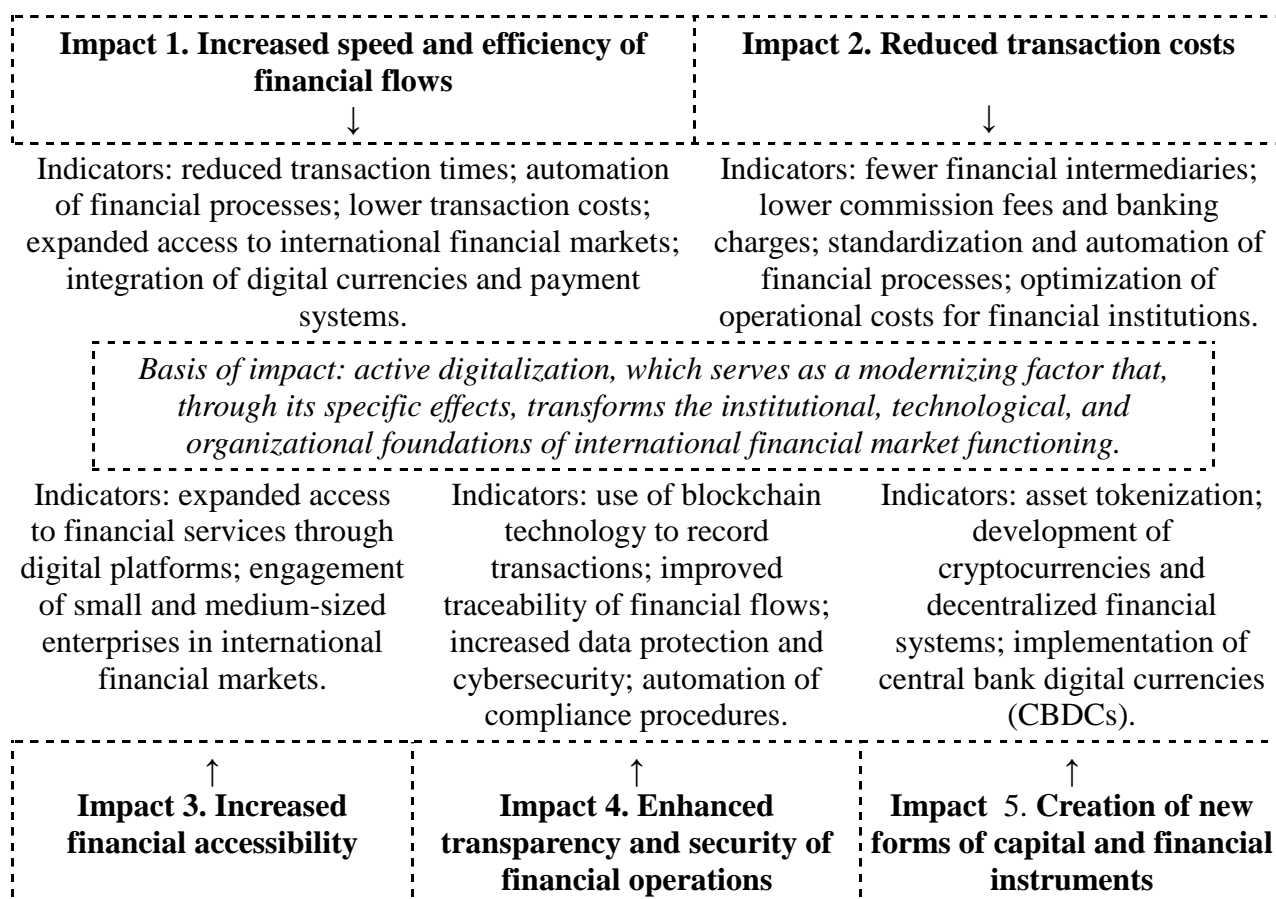


Figure 1. Specifics of the digitalization of international financial markets as a factor in modernizing capital flows in the global economy

Source: compiled by the authors based on [1; 3-4]

Regarding changes in the institutional foundations of international financial market functioning, it should be noted that they gradually transform capital flows, making them more open (allowing freer movement between countries, sectors, and market participants [1]) and more regulated (subject to effective tools for monitoring transparency and legality [5]). This transformation arises because digital technologies facilitate the emergence of new institutional forms (see Table 1), such as digital exchanges, virtual banks, and DeFi platforms, which operate outside traditional financial intermediary structures.

Table 1. New institutional forms of international financial markets

Institutional forms	Specifics of the functioning of the institutional form	Impact of the institutional form on capital flows
Digital exchanges	They facilitate the buying and selling of financial assets, including cryptocurrencies, tokenized securities, and derivatives, entirely in electronic form. Their operations are based on blockchain technology, which ensures transaction transparency, instant settlement of deals, and minimal intermediary costs.	They contribute to faster capital circulation, the formation of global liquidity in digital assets, reduced transaction costs, and expanded investor participation in international financial flows.
Virtual banks (digital banks, neobanks)	They operate without physical branches and provide banking services exclusively through digital platforms. They use big data analytics, cloud technologies, and artificial intelligence to personalize services and reduce operational costs.	They provide broader access to financial resources, enhance financial inclusion, lower barriers to participation in international settlements, and stimulate capital mobility.
Decentralized finance platforms (DeFi)	They enable financial transactions without traditional intermediaries (banks, brokers, clearinghouses) through blockchain-based smart contracts. They are characterized by a high level of autonomy and transparency.	They facilitate the creation of new capital flow channels, improve transaction efficiency and security, and establish alternative models for lending, investing, and insurance at the global level.

Source: compiled by the authors based on [1; 5-6]

When it is said that these new institutional forms operate “outside traditional financial intermediary structures,” it means conducting financial transactions without classical intermediaries, such as banks, brokers, or insurance companies. In practice, virtual banks or DeFi platforms enable users to transact directly with one another, without a bank as a mandatory intermediary, by using blockchain-based smart contracts to automatically execute financial operations—such as lending,

asset exchange, and investment—without centralized control or traditional regulatory oversight [6].

Trading in securities or cryptocurrencies also occurs without traditional brokerage firms, which previously controlled market access and handled clearing. These changes in the institutional foundations of international financial markets highlight the formation of a new institutional architecture for global financial markets, within which the digital entities we have described are gradually gaining the status of full participants in the international financial environment.

For example, the emergence of international crypto exchanges (such as Binance, Coinbase, and Kraken) has created alternative channels for capital circulation, where investment flows are conducted without traditional financial intermediaries. The development of virtual banks (such as Revolut, N26, or Monzo) has enabled the opening of accounts and the execution of international payments entirely in digital format. Additionally, decentralized finance platforms (such as Aave, Compound, or Uniswap) allow users to independently conduct lending, deposit, and exchange operations, increasing transparency in capital flows and reducing the concentration of financial resources in the hands of traditional institutions.

Regarding changes in the technological foundations of international financial market functioning, it should be noted that they make capital flows faster (executed instantly or in real time), safer (with minimal risk of fraud, unauthorized access, or errors in financial operations), and more efficient (reducing transaction costs and increasing accuracy and transparency). This is driven by the active implementation of blockchain, artificial intelligence, big data, cloud computing, and smart contracts, which enable the automation of financial processes, instant settlements, lower transaction costs, and enhanced cybersecurity. For example, the use of blockchain technology in international payments (platforms such as RippleNet, Stellar, and SWIFT gpi) allows cross-border transactions to be completed within seconds with minimal fees. Blockchain-based smart contracts ensure the automatic execution of financial agreement terms—such as in lending, insurance, or investment—eliminating the need for intermediaries and reducing the risk of default. Artificial intelligence (AI) is actively used to analyze market trends, forecast currency

fluctuations, and detect financial fraud in real time. For example, analytical systems at leading banks (HSBC, J.P. Morgan, Deutsche Bank) employ machine learning algorithms for automated transaction monitoring and risk management. In effect, technological modernization is creating an infrastructure that enables the creation, circulation, storage, accounting, and control of financial resources in digital form.

Regarding changes in the organizational foundations of international financial market functioning, it should be noted that they make capital flows more flexible (adapted to the needs of different participants), decentralized (without the monopoly of banks and exchanges [4]), and accessible (for small businesses and individual investors [4-5]). In particular, digital platforms have enabled new models of market participant interaction, including [1; 5]:

1. Peer-to-peer (P2P) – direct interaction between parties (investor ↔ borrower, seller ↔ buyer) without intermediaries, facilitated by digital platforms. This results in faster transactions, lower costs, and greater access to capital.
2. Crowdfunding / crowdinvesting – a collective model where a large number of small investors fund a project or company via an online platform. This democratizes investment and expands the financing base.
3. Asset tokenization – the conversion of ownership rights into digital tokens that can be bought, sold, or exchanged without traditional intermediaries. This increases liquidity and simplifies asset circulation on international markets.
4. Digital brokerage – a model in which brokerage activities are conducted entirely online, without physical offices, with automated transactions and minimal fees. This provides global market access, inclusivity, and faster trading.

These models of interaction among financial market participants determine how capital flows are organized within the digital economy. They contribute to the decentralization of financial flows, increased participation of small businesses and individual investors, and the integration of financial markets into the global digital ecosystem.

Consequently, the digitalization of international financial markets results in capital flows in the global economy characterized by several specific features, including (see Table 2): speed; maximum security; maximum efficiency; openness;

and regulation. It should be noted that, when manifested systematically, these features promote deeper financial integration, expanded access to resources, increased transparency of market processes, and the formation of a more resilient and flexible financial system [1-2].

Table 2. Systematization and characteristics of capital flow features in digitalized international financial markets

Features of capital flows in the global economy	Specifics of the manifestation of capital flow features in digitalized markets
Speed	Thanks to digital technologies, international financial transactions are executed instantly or in real time, without long delays associated with bank transfers, manual agreement processes, or paper documentation.
Maximum security	Reduced risks of fraud, unauthorized access, and errors in financial operations.
Maximum efficiency	Digital technologies decrease transaction costs, increase accuracy and transparency of operations, and optimize the management of financial flows.
Openness	Increased transparency, accessibility, and equality of participation in international financial markets, due to the emergence of new investment channels and the expansion of market participants.
Regulation	Digital technologies create the need for new regulatory mechanisms that ensure stability, transparency, and protection of market participants' rights.

Source: compiled by the authors based on [1-2; 4-5]

This means that, as a result, digital transformation serves not only as a tool for modernizing global financial flows but also as a key factor in enhancing the competitiveness of national economies in the global financial arena.

Conclusions. Within the framework of the study, it has been established that the digitalization of international financial markets is shaping a new type of capital flow—decentralized, digital, and highly technologically integrated—characterized by speed, maximum security, efficiency, openness, and regulation. Moreover, attention is drawn to the fact that the systematic manifestation of these features contributes to deeper financial integration, expanded access to resources, greater transparency in the movement of funds, investments, securities, and credits between countries, industries, and enterprises, as well as to the formation of a more resilient and flexible financial system.

The study demonstrates that digital transformation of international capital markets acts not only as a tool for modernizing global financial flows but also as a key factor in enhancing the competitiveness of national economies in the global financial arena.

It is established that digital transformation modernizes capital flows through: transactions executed in real time via digital platforms and blockchain technologies; reduction of transaction costs, minimization of human errors, and mitigation of fraud risks; the creation of new channels for capital movement that enable investment and lending outside traditional financial intermediaries; and operational monitoring of transactions.

It is further observed that the digitalization of international financial markets enhances the competitiveness of national economies through: broader access to financial resources, allowing enterprises and investors easier entry to global capital markets; reduction of barriers and costs by minimizing intermediary fees and administrative obstacles; integration into global financial flows, making national economies that utilize digital financial instruments more attractive to international investors; and promotion of innovation and financial flexibility, as digital technologies enable national economies to rapidly adapt to global changes and develop new financial products.

Further research could focus on assessing the impact of digitalization in international financial markets on the long-term sustainability of national economies, the effectiveness of regulatory frameworks, and the development of new models for global capital flows.

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