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MODERN TRANSFORMATIONS OF NATIONAL ECONOMIES IN RESPONSE TO THE GLOBALIZATION OF FINANCE AND CREDIT

The study's relevance is determined by the fact that the global economy is a chaotic system composed of millions of interconnected elements (economies of individual countries). In this context, it is emphasized that each national economy experiences periods of growth and decline. These cycles have an irregular nature and can be triggered by intermittencies in the finance and credit sectors in globalized economies, specifically phenomena of sudden, unpredictable surges in activity or volatility that cause their transformation, while in periods of relative stability, they ensure their sustainability. Thus, the article's aim is a comprehensive analysis of typical transformations of national economies as a response to the globalization of the finance and credit. The study emphasizes that the globalization of the finance and credit creates a highly dynamic and complex environment where the economies of various countries are closely interconnected. As a result of globalization, financial crises, technological innovations, and geopolitical events can rapidly spread across the globe, triggering significant changes in the economies of different nations. These processes are quite chaotic, but they exhibit certain recurring patterns. The transformations of national economies, driven by core intermittent events, manifest in the liberalization of financial markets, the development of financial innovations, the strengthening of central banks, and the reinforcement of international cooperation. Most countries have liberalized their financial markets by lowering barriers for foreign investors and expanding access to financial services. National economies are actively developing financial innovations such as fintech, blockchain, and cryptocurrencies to adapt to the new conditions of global competition. Central banks are playing an increasingly important role in stabilizing financial systems and mitigating the effects of financial crises. Countries are collaborating internationally to develop common rules and standards in the financial and credit sectors, aiming to minimize the risks of global financial crises. The transformations of national economies affect developed and developing countries, bringing about positive and negative consequences,

Keywords: *financial crisis; intermittent phenomena in the field of finance and credit; liberalization of financial markets; stabilization of financial systems.*

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СУЧАСНІ ТРАНСФОРМАЦІЇ НАЦІОНАЛЬНИХ ЕКОНОМІК ЯК ВІДГУК НА ГЛОБАЛІЗАЦІЮ СФЕРИ ФІНАНСІВ ТА КРЕДИТУ

Актуальність дослідження зумовлена тим, що світова економіка являє собою хаотичну систему, яка складається з мільйонів взаємопов'язаних елементів, таких як економіки окремих країн. Кожна національна економіка піддається циклічним коливанням, що проявляються у чергуванні періодів сталого розвитку, зростання та спаду. Ці цикли мають нерегулярний характер і в умовах глобалізації посилюються через підвищену мінливість фінансового та кредитного секторів. Раптові сплески активності або зміни в цих сферах (як інтермітентні явищами) можуть викликати значні трансформації в економіці, а в періоди відносної стабільності – сприяти її збереженню. Відтак, метою статті є комплексний аналіз типових трансформацій національних економік у відповідь на процеси глобалізації у сфері фінансів та кредиту. Доведено, що глобалізація фінансової та кредитної сфер формує надзвичайно динамічне і складне середовище, в якому економіки різних країн стають тісно взаємопов'язаними. Внаслідок глобалізації фінансові кризи, технологічні інновації та геополітичні події можуть швидко поширюватися по всьому світу, спричиняючи значні зміни в економіках різних країн. Ці процеси, хоч і мають хаотичний характер, водночас демонструють певні повторювані патерни, що дозволяє аналізувати та прогнозувати їхні впливи. Проявами трансформації національних економік, зумовленими основними інтермітентними явищами, є лібералізація фінансових *ринків, розвиток фінансових інновацій, посилення ролі центральних банків та зміцнення міжнародного співробітництва. Національні економіки активно розвивають фінансові інновації, такі як фінтех, блокчейн та криптовалюти, щоб адаптуватися до нових умов глобальної конкуренції. Центральні банки відіграють все більш важливу роль у стабілізації фінансових систем та пом'якшенні наслідків фінансових криз. Країни співпрацюють на міжнародному рівні для розробки спільних правил та стандартів у фінансовій та кредитній сферах (щоб мінімізувати ризики глобальних фінансових та геополітичних криз). Трансформації національних економік стосуються як розвинених країн, так і тих, що розвиваються, і мають як позитивні, так і негативні наслідки.*

Ключові слова: *фінансова криза, інтермітентні явища сфери фінансів та кредиту, лібералізація фінансових ринків, стабілізація фінансових систем.*

Introduction. The globalization of finance and credit is a powerful catalyst for change in the modern global economy. This system is extremely complex, and the processes occurring within it often have a chaotic nature. This conclusion is driven by the fundamental properties of complex systems. Their behavior largely depends on initial conditions, and minor changes in the external environment can lead to unpredictable consequences. The global economy undoubtedly exhibits signs of deterministic chaos: its development follows certain economic laws, yet it also has an irregular character. The global economy is a chaotic system because it consists of millions of interconnected elements (the economies of individual countries, local economies, and so on). A change in one element can trigger a chain reaction that affects the entire system [2]. The interconnections between the elements of the global economy are non-linear, meaning that a change in one variable does not lead to a proportional change in another. The global economy is constantly influenced by external factors such as political events, natural disasters, technological breakthroughs, and more.

From this perspective, national economies, as components of the global system, can also be regarded as non-linear dynamic systems. As a result, national economies constantly undergo periods of growth and decline. These cycles are irregular and can be triggered by intermittencies. In this context, the financial and credit sectors in globalized economies also serve as a source of intermittency, causing transformations during sudden, unpredictable bursts of activity or volatility while ensuring stability during periods of relative calm.

Materials and methods. The research indicates that globalized finance and credit by domestic and foreign scholars studies. So, O.O. Maslyhan, T.V. Shabelnyk, O.O. Korolovych, N.S. Liba [3], Honglei X. Hamilton, Zaidon Z., and Wei W. [5] emphasize in a series of scientific studies that the sphere of globalized finance and credit has become an extraordinarily complex system of interconnected financial markets, institutions, and instruments that span the entire globe. Liubokhynets L.S. and Labunets O.O. [2] also point out that all financial operations, such as investments, lending, currency trading, and securities trading, occur at the international level, crossing the borders of countries. At the same time, it is evident from the content of the outlined studies, as well as from the works of various scholars, that the globalized spheres of finance and credit have formed significant intermittencies within their structure, through which they facilitate transformations in national economies. It's also emphasized in the works of Mikhalchynets G.T. [6]. However, the content and typical transformations of national economies under the influence of the identified intermittencies are currently not well explored in the scientific literature.

The article aims to conduct a comprehensive analysis of the typical transformations of national economies as a response to the globalization of the finance and credit sectors.

Results. The research indicates that the core characteristics of the globalized financial and credit sphere that have formed intermittencies are turbulent flows of capital, technology, and integration, which can spread from one country to another and act as simple attractors with limited cycles (i.e., they tend to repeat certain patterns, taking economic cycles into account, but are still quite chaotic and unpredictable) [4]. According to the scientific literature [2; 4–5], such intermittencies include financial crises, technological innovations, and geopolitical crises that spread between countries at an incredible speed and trigger typical transformations (i.e., that are characteristic of most countries).

It is worth noting that sudden financial market crashes, banking crises, and currency crises are vivid examples of intermittency that lead to diverse and profound transformations in national economies. Transformation, depending on the types of financial crises (banking, currency, debt, etc.), manifests as a polyvariant restructuring of financial systems, changes in regulatory norms, and a revision of business models within economies [8]. The nature by which financial crises are identified as manifestations of intermittency in the sphere of finance and credit, which transforms national economies, is outlined in the content of Table 1.

The transformations we have outlined are always noticeable. For example, the Great Depression of 1929 led to the creation of social security systems in many countries, an increased role of the state in the

Table 1 – Directions of intermittent financial crises that transform national economies

The impact of financial crises on national economies		The impact of financial crises on changes in business models in economies	
Direction of influence	Nature of influence	Direction of influence	Nature of influence
Strengthening of regulatory control	After each major crisis, there is a strengthening of regulatory control over financial institutions. New capitalization standards are introduced, risky activities of banks are restricted, and regulatory bodies for financial markets are established.	Focus on stability	After crises, business entities begin to pay more attention to the stability of their operations, reducing risk levels and diversifying their activities.
Change in the structure of the banking sector	Crisis often leads to the bankruptcy of weak banks and the concentration of the banking sector in the hands of a few large players.	Innovations	Crisis stimulates the search for new business models and technological solutions that allow companies to adapt to new conditions.
Development of new financial instruments	In response to crises, new financial instruments are developed with the aim of reducing risks and enhancing the stability of the financial system.	The increasing role of the state	After crises, the role of the state in the economy usually increases, as it takes on functions related to supporting economic growth and stabilizing the financial system*.

Note

**Central banks play an increasingly important role in stabilizing financial systems and mitigating the effects of financial crises.*

Source: formulated by the author based on [1; 4; 8]

economy, and a change in the approach to regulating financial markets [8]. The Asian financial crisis of 1997 contributed to the reform of financial systems in Asia, strengthened the role of international financial institutions, and fostered regional cooperation. The financial crisis of 2008 led to the establishment of regulatory bodies such as the Financial Stability Board, strengthened capitalization requirements for banks, and the development of new tools for risk management. At the same time, in addition to the obvious transformations of national economies (highlighted in the table), there are also delayed effects–financial crises often exacerbate inequality in society, can lead to changes in political regimes, and may result in a reassessment of economic policies. For example, the Asian financial crisis of 1997 gradually led to political protests and government changes in many countries in the region [8]. It was not an immediate process but rather a chain reaction that unfolded over time. Thus, intermittent financial crises in modern conditions are a factor that limits the maneuverability of economic policy for national governments, as they must be cautious about the influences of external investors and international financial institutions.

According to the findings of modern research, it is clear that new technologies in the financt and credit, such as blockchain, artificial intelligence, and financial technologies (FinTech), are examples of intermittent changes that provoke revolutionary shifts and various transformations in national economies [1]. These transformations can manifest in the emergence of new markets, products, and services, as well as in the disappearance of traditional institutions [2]. The nature by new technologies are identified as manifestations of intermittent changes in the finance and credit, which transform national economies, is outlined in the content of Table 2.

The transformations of the national economy are not always noticeable in the initial stages. However, they can have far-reaching consequences that complicate the finance and credit sector.

This shift is evident in the case of Bitcoin and other cryptocurrencies. From 2010 to 2019, they gradually established a new asset class and have been actively utilized in certain countries, particularly those experiencing high inflation and unstable exchange rates. They serve as an alternative means of preserving value and bypassing currency restrictions [5]. In Asia, Latin America, and African countries cryptocurrencies are a popular tool for conducting international payments. So, in Venezuela, due to hyperinflation and strict currency controls, the "bolívar" has sharply depreciated, and cryptocurrencies are the primary means of preserving savings and conducting international payments [8]. In Nigeria, the instability of the national currency, the "naira", and strict currency controls have turned cryptocurrencies into the primary means of international transfers (in 2023, 69% of international transfers were made using cryptocurrency) [8]. The sanctions imposed on Iran have complicated international payments, and cryptocurrencies have become one of the ways to circumvent these restrictions.

Table 2 – Directions of intermittent changes of new technologies in the finance and credit that transform national economies

The impact of new technologies on national economies	
Direction of influence	**Nature of influence**
Decentralization of finance	Blockchain technologies enable the creation of decentralized financial systems (DeFi) that minimize the role of intermediaries (banks, payment systems) and provide users with greater control over their finances.
New financial products and services	Artificial intelligence allows for the development of personalized financial products and services, as well as the automation of many processes, which reduces costs and increases efficiency.
Change in the role of traditional institutions	Banks and other financial institutions are forced to adapt to new conditions or risk losing their positions in the market
Emergence of new markets	Cryptocurrencies, asset tokenization, and other innovations create new markets and investment opportunities.
Increased financial inclusivity	New technologies enable millions of people who previously had no access to financial services to obtain them.
Changes in regulation	The emergence of new technologies requires the development of new rules and standards, which can lead to significant changes in financial regulation.

Source: formulated by the author based on [2-4; 7]

It should be noted that the globalization of the finance and credit sector both strengthens positive and negative consequences of intermittent changes. Moreover, cryptocurrencies are perceived as a new frontier for development and research in countries with a developed IT industry.

In the United States, Canada, and Northern European countries, there is significant interest in blockchain technology and cryptocurrencies. Startups working in this field are actively developing, and investors are putting substantial funds into cryptocurrency projects. According to PitchBook, in 2022, investors in these countries invested over $30 billion in blockchain startups, and in 2023, that amount increased to $49 billion. As increasingly diverse technologies are integrated into global finance and credit, they become more complex and interconnected. This raises the risk of systemic crises that could have catastrophic consequences for the global economy.

Political crises, wars, and trade wars are examples of intermittent changes that, through significant fluctuations in financial and credit markets, shape the transformations of national economies. These crises can accompany financial crises or develop as independent phenomena [8]. The nature by which the outlined geopolitical crises are identified as manifestations of intermittent changes is directed at the volatility of financial and credit markets or the overall redistribution of economic activity among countries, as outlined in the content of Table 3.

Geopolitical crises, such as the First and Second World Wars, as well as the Cold War, clearly demonstrate how political instability can cause significant disruptions in financial markets. The increased uncertainty arising from such crises leads to heightened volatility, the collapse of currency systems, hyperinflation, and restrictions on investments, hindering the economic development of many countries. For example, the beginning of the 'Cold War' triggered a massive shift of production and investments from Europe to the United States. Geopolitical changes are a powerful catalyst for the redistribution of economic power. After World War II, the United States, due to its active participation in the war and substantial investments in the reconstruction of Europe (the Marshall Plan), became the global economic leader, displacing Great Britain. A modern example is the rapid rise of China, which has transformed into an economic giant in just a few decades. These processes demonstrate that geopolitical shifts change the overall size of the financial sector in countries and lead to the relocation of economic activity between sectors, regions, and even continents.

Based on the outlined intermittent changes (including financial crises, technological innovations, and geopolitical crises [7]), financial and credit globalization – characterized by the integration of financial markets, the growth of cross-border capital flows, and the unification of financial instruments–has gradually formed specific transformations in national economies that can have both positive and negative manifestations.

Among the positive outcomes of the globalization of the financial and credit are:

– The increase in investment flows between countries (which contributed to economic growth and the creation of new jobs [7]);

Table 3 – Directions of intermittent geopolitical crises that provoke fluctuations in financial and credit markets and shape the transformations of national economies

The impact of volatility in financial and credit markets on national economies		The impact of the redistribution of economic activity among countries	
Direction of influence	Nature of influence	Direction of influence	Nature of influence
Volatility	They create high uncertainty, leading to sharp fluctuations in exchange rates, stock prices, and other financial instruments.	Change in trade flows	Trade wars and other political conflicts can lead to the redirection of trade and financial flows and changes in global production chains.
Capital outflow	Investors often withdraw their funds from countries where political risks arise, which can result in currency devaluation and liquidity shortages.	Capital migration	Investors may relocate their funds to other countries that are perceived as safer.
Increase in risk premiums	Investors seek higher returns on investments in risky assets, which can lead to an increase in the cost of borrowing	Change in competitiveness	Political crises can alter the competitiveness of different countries and sectors and lead to the monopolization of the benefits of globalization.*

Note

**The benefits of globalization are concentrated in the hands of a small group of people, while the majority of the population may experience negative consequences.*

Source: formulated by the author based on [4-5; 7]

– The development of national financial markets (which have become more liquid and diversified, enhancing their efficiency and providing access to a wider range of financial instruments [5-6]);

– Technological progress (particularly in financial technologies, which have made financial services more accessible and convenient for the population [2]).

In other words, countries that actively integrate into the global financial system gain access to new markets and technologies, contributing to their economic development.

Among the negative consequences of the globalization of financial and credit are the interdependence of financial markets, the risk of monopolization of the benefits of globalization (if they are concentrated in the hands of a small group of people), the limitations on the maneuverability of national governments' economic policies (as they become more dependent on external investors and international financial institutions), and the increasing complexity and interconnectivity of all processes (while the impact of intermittent crises grows).

Conclusions. Within the scope of the research, the author emphasizes that the globalization of the financial and credit sectors creates a very dynamic and complex environment in which the economies of different countries are closely interconnected. In this regard, the following conclusions have been drawn::

1. As a result of globalization, financial crises, technological innovations, and geopolitical events can rapidly spread across the globe, causing significant changes in the economies of various countries. These processes are quite chaotic, yet they exhibit certain recurring patterns.

2. A manifestation of the transformation of national economies that have already arisen from the main intermissions (including financial crises, technological innovations, and geopolitical crises) is the liberalization of financial markets, the development of financial innovations, the strengthening of the role of central banks, and the enhancement of international cooperation. Most countries have liberalized their financial markets by lowering barriers to foreign investors and expanding access to financial services. National economies are actively developing financial innovations such as fintech, blockchain, and cryptocurrencies to adapt to the new conditions of global competition. Central banks play an increasingly important role in stabilizing financial systems and mitigating the impacts of financial crises. Countries cooperate internationally to develop common rules and standards in the financial and credit sectors to minimize the risks of global financial crises.

3. The transformations of national economies concern developed and developing countries and have positive and negative consequences. Among the positive effects of the globalization of finance and credit are increased investments, the development of national financial markets, and technological progress. Among the negative consequences of the globalization of the financial and credit sectors are

the interdependence of financial markets, the risk of monopolization of the benefits of globalization, the limitation of economic policy maneuverability for national governments, and the increasing complexity and interconnectedness of all processes.

A promising area for research is the comparative analysis of the transformations of national economies in different regions of the world, aimed at identifying specific features and challenges associated with the globalization of the financial and credit sectors.

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