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METHODOLOGY FOR ASSESSING THE TRANSFORMATION OF THE FINANCIAL SERVICES MARKET IN UKRAINE UNDER THE INFLUENCE OF FINTECH

The relevance of the study is determined by the increasing number of new technologies being implemented in the financial sector (or FinTech) and the associated changes in the traditional model of their operation. In particular, the highlighted model undergoes a series of changes that result in the expansion of the intermediation function of its core agents. Such changes can include increased speed and accessibility of financial services; improved decision-making processes; enhanced data security. In fact, new technologies in the financial sector are shaping digital financial assets and enabling the development of new forms of financial services. At the same time, new digital technologies in the financial sector are leading to a transformation of the essence of financial services markets, forming a distinct model of their transformation aimed at improving the efficiency of conducted operations. Based on the provided provisions, the research is aimed at studying and determining the key indicators that most comprehensively characterize the state of financial services markets, as well as establishing a methodology for assessing the transformation of financial services markets in Ukraine. Digital financial technologies (FinTech) are considered as various tools for influencing the financial sector, which are utilized by resident corporations of Ukraine, including quasi-corporations whose primary function is to provide financial services. It is worth noting that these technologies themselves are not functional but shape such functionality when integrated into various technological structures existing in the financial sector. It is precisely the processes of such integration that define the forms of FinTech-related transformations in financial services markets, including their performance indicators (which are linked to the value of underlying assets). It is important to highlight that these technologies themselves are not inherently functional; rather, they shape functionality when integrated into various technological structures within the financial sector. The processes of integration are what define the manifestations of FinTech-driven transformations in financial services markets, including their performance indicators, which are closely tied to the value of underlying assets.

Keywords: technologies, financial sector, performance, target funds, structures.

JEL classification: A14, C80, C88

МЕТОДИКА ОЦІНКИ ТРАНСФОРМАЦІЙ РИНКІВ ФІНАНСОВИХ ПОСЛУГ УКРАЇНИ ПІД ВПЛИВОМ ФІНТЕХ

Актуальність дослідження визначена зростанням кількості нових технологій, які впроваджуються у фінансовому секторі (або фінтеху), і пов'язаними з цим змінами у традиційній моделі їх функціонування. Зокрема, в виділеній моделі відбувається цілий ряд змін, які обумовлюють розширення посередницької функції її базових агентів. До таких змін можна віднести: збільшення швидкості та доступності фінансових послуг; поліпшення процесу прийняття рішень; підвищення захисту даних. Фактично, нові технології у фінансовому секторі формують цифрові фінансові активи і дозволяють розвивати нові форми фінансових послуг. У той же час, нові цифрові технології у фінансовому секторі призводять до того, що сутність ринків фінансових послуг починає змінюватися, формуючи особливу модель їх трансформації, спрямовану на підвищення результативності проведених операцій. Виходячи з наведених положень, дослідження спрямоване на вивчення та визначення ключових показників, які найбільш повно характеризують стан ринків

фінансових послуг, а також на встановлення методики оцінки трансформації ринків фінансових послуг в Україні. Цифрові фінансові технології (фінтех) розглядаються як різноманітні інструменти для впливу на фінансовий сектор, які використовуються корпораціями-резидентами України, включаючи квазікорпорації, чия основна функція полягає в наданні фінансових послуг. Варто відзначити, що самі ці технології не є функціональними, однак формують таку функціональність в разі їх інтеграції в різні технологічні структури, що існують у фінансовому секторі. Саме процеси такої інтеграції визначають форми пов'язаних із фінтех трансформацій ринків фінансових послуг, зокрема їх результативні показники (які пов'язані із вартістю базових активів). Згідно з дослідженням, рекомендується представлення комплексної форми трансформації ринків фінансових послуг, а саме: через зміни у результативності проведення будь-яких фінансових операцій з використанням синтезованих фінтех-технологій; через якісні технологічні зміни, які синтезуються фінтех-рішеннями, за умови, що вони корелюють із змінами у результативності.

Ключові слова: технології, фінансовий сектор, результативність, цільові кошти, структури.

Target setting. The relevance of the research is driven by the increasing adoption of new technologies within the financial sector (or fintech) and the associated changes in the traditional model of their operation. In the highlighted model, a series of changes occur that lead to the expansion of the intermediary function of its core agents (which include resident corporations, including quasi-corporations). These changes include increasing the speed and accessibility of financial services (thanks to fintech technologies, many financial services are becoming faster and more accessible than before); improving the decision-making process (many agents are implementing analytical tools and machine learning to create services that assist clients in making decisions about their investments and financial transactions); enhancing data security. In fact, new technologies in the financial sector are also shaping digital financial assets and enabling the development of new forms of financial services based on them, such as crowdfunding, cryptocurrencies, digital micro-lending, and others. Thus, new digital technologies in the financial sector are leading to a transformation in financial service markets, creating a distinct model of their evolution aimed at increasing the efficiency of conducted operations.

Analysis of research and publications. The methodology for assessing changes in the financial services markets of Ukraine has been discussed in the works of such researchers as L.V. Zherdetska, D.I. Horodinsky, L.A. Dudinets, S. Brus, and others. The theoretical and methodological principles of "Financial Services Market Transformations", including those influenced by FinTech, have been examined by G.T. Mykhailchynts, A.Yu. Semenog, Ya.M. Kryvyich, and S.V. Tsirylik. In most cases, scientists consider such transformations in financial services markets solely from the perspective of their qualitative manifestations, without considering changes in performance and the redistribution of volumes of circulating financial resources, which underscores the need for research in this field.

The wording of the purposes of article (problem). The goal of the study is to examine and identify key indicators that comprehensively characterize the state of financial service markets and to determine a methodology for evaluating the transformation of Ukraine's financial service markets.

The paper main body with full reasoning of academic results. In the study, the concept of "transformation of financial service markets" is used as a comprehensive category that should be viewed through the lens of multiple transformations in the processes of meeting customer needs in financial management and/or achieving financial goals. Therefore, this category is oriented towards conducting any financial transactions related to the provision of financial services, each of which can be explained and

modeled based on practices of implementing digital financial technologies (or FinTech). This term is also actively mentioned in domestic financial theory, including as a synonymous category with "digital transformation of the financial market" and correlated with the category of digital financial technologies [4–5]. It should be noted that the use of the term "transformation of financial service markets" itself generates debates both about its content and the general nature of transformations (namely, the changes in the performance of financial service markets under the influence of fintech, the redistribution of volumes of circulating financial resources on them due to FinTech, etc.). Thus, it is evident that the theory of "transformation of financial service markets" allows for a comprehensive perspective on the financial service market and raises new questions that have not received adequate attention before. Among them are the classification of fintech and related transformations; defining the form of representation of financial service markets as a unified structure; identifying the internal specifics of transformations in financial service markets in terms of changes in their internal performance and the volume of financial resources circulating within them; formalizing models of performance change in the process of transforming specific financial transaction processes.

Currently, FinTech is regarded as various targeted means of influencing the financial sector and is classified into programs and applications, gateways, devices, methods, and technological systems used by resident corporations in Ukraine, including quasi-corporations, whose primary function is the provision of financial services [1–2].

These technologies themselves are not functional on their own; however, they create such functionality when integrated into various technological structures of financial services existing in the financial sector. These structures can be interpreted as organizational frameworks that determine how technology is used in the provision of financial services, including the processes, systems, and procedures involved in organizing work with the technology. It is precisely the processes of such integration that define the forms of FinTech-related transformations in financial service markets, specifically their performance indicators linked to the value of underlying assets.

However, in most sources [1; 2; 6], researchers only consider such transformations in financial service markets from the perspective of their qualitative manifestations, without considering changes in performance and the redistribution of volumes of financial resources circulating within them.

This is precisely why such an approach to representing the forms of transformation in financial service markets is necessary, where they are characterized comprehensively [5]:

Through changes in the performance of any financial transactions synthesized by fintech (in terms of the market's functioning or the magnitude of asset value increase/decrease used in transactions over time).

Through qualitative technological changes synthesized by FinTech if they correlate with changes in performance.

In the research, by "transformation of financial service markets," we will understand the economic and technological changes in the seller-buyer relationship synthesized by fintech. These changes occur through the quality and performance of financial services, both in economic activities and in the conduct of any financial transactions carried out within the realm of financial services [4-5]. These changes take place within a unified structure in which financial service objects, financial service providers, and specific services operate to transform monetary funds into financial capital.

There is a close relationship between financial services and financial transactions, as many financial services can encompass financial operations. Defining the form of representation of financial service markets within a unified structure allows for delineating the boundaries of transformations and is a concept found in the works of many scholars. Most authors [1; 5] include four main components in the concept of a "transformative structure of financial service markets": 1) stock market; 2) credit market; 3) currency market; 4) precious metals market. With such a generalization, it is not possible to clearly delineate the boundaries of transformations. However, indirectly, there is a significant diversity of elements present in all components, and highlighting these elements will help to clearly specify the boundaries of transformations.

Thus, indirectly, within the structure of the identified components, the following elements are present [5; 7]: in the "Stock Market" component – the market for government bonds, the market for promissory notes, the stock market, the market for corporate bonds; in the "Credit Market" component – the market for short-term loans, the market for medium- and long-term loans; in the "Currency Market" component – the international currency market, the market for medium- and long-term loans, the international bond market: in the "Precious metals market" component, no

specific elements are highlighted. The model of a unified structure should be developed with a clearly defined scope of services, considering the boundaries of transformations related to specific operations with a particular underlying asset (Table 1).

This specificity allows for identifying the components of the unified structure to represent it in form and determine the boundaries of transformation in financial service markets. In fact, the constituent transformations of financial service markets are detailed economic and technological changes in seller-buyer relationships synthesized by FinTech in financial service markets.

Currently, there is a variety of approaches to evaluating the transformations in financial service markets. Namely, the assessment of transformations is proposed based on the absolute change in the price of the underlying asset. It can be achieved through market price volatility and the value of the underlying asset. It can be achieved through indicators of mobilizing idle funds and their effective allocation. It can be achieved through the correlation of market prices of underlying assets in financial service markets with fintech influencing factors. It is important to develop a specialized set of key indicators that, when oriented towards a clear segmentation of financial service markets into transformation zones, will characterize both the overall state of financial service markets and their specific elements, considering the implementation of digital financial technologies (FinTech) based on regression analysis. In our opinion, it is the regression analysis that identifies the strength of the relationship between changes in the prices of financial instruments in the financial market and specific information received from certain directions, excluding anomalous observations.

According to the above statements, the structure of financial service markets is a combinatorial category, the content of which varies based on the types of operations with underlying assets and the structures of financial services. Naturally, reflecting and measuring the performance of financial service markets is formed based on the structuring of their environment, particularly their components, in accordance with external and internal impacts resulting from the implementation of fintech. These impacts are determined by the function of the value

Table 1

Components of the unified structure of financial service market transformations

Components	Characteristic of components
Government bond market	It defines the boundaries of transformations through operations involving a fundamental asset such as government bonds, which are debt securities issued by a government to raise funds.
Promissory note market	It defines the boundaries of transformations through operations involving a fundamental asset such as short-term debt securities issued by firms or companies to obtain short-term financing.
Stock market	It defines the boundaries of transformations through operations involving a fundamental asset such as stocks.
Currency market, medium-term and long-term credit markets	It defines the boundaries of transformations through operations involving a fundamental asset such as loans issued in various currencies for medium-term and long-term periods.
International currency market	It defines the boundaries of transformations through operations involving a fundamental asset such as currencies from different countries around the world.
International bond market	It defines the boundaries of transformations through operations involving a fundamental asset such as bonds from various issuers, including governments, corporations, and municipalities.
Precious metals market	It defines the boundaries of transformations through operations involving a fundamental asset such as precious metals, including gold, silver, platinum, palladium, and others.

Source: formed based on [2; 5; 7]

(price) of underlying assets or their yield. It involves the "y" indicator and the variables "x" (influencing factors).

To create a set of key indicators, all of them will be elements of possible functions "x" and "y," defined as dependent sums of performance indicators at each time step. The main goal is to create such a set of "x" and "y" that will be sufficient for constructing a high-quality multiple regression equation.

The conceptual basis for selecting key indicators lies in measuring performance through solving combinatorial problems to determine the possibilities of minimizing or enhancing effects (due to influencing factors like FinTech) and outcomes (due to the interdependence of internal performance elements and fintech implementation). It considers the combinatorics of variables that shape the environment of the financial service market. The combinatorics of sets of indicators, in which it is possible to solve problems related to the choice of the indicator for transformation zones, should be structured according to the financial service market's framework. Let's examine the combinatorics of indicator sets:

– The government bond market – the performance indicator (or "y") is the yield of operations and the price of debt securities issued by the government of a country.

In the process of income and Ukrainian government bond price determination, several factors need to be considered, such as the nominal bond value, the current coupon rate, the remaining time to maturity, and current market conditions. Among the influencing factors ("x") on the performance indicators formed considering the FinTech integration in the environment of this market, we have identified those highlighted in Table 2.

– The market for promissory notes is characterized by the effectiveness of operations and the price of short-term debt securities issued by companies or corporations. To determine the yield and price of a promissory note, several factors need to be considered, such as the stated interest rate on the promissory note, its face value, and the redemption price. Among the influencing factors (x) on the performance indicators, which are formulated with the FinTech integration into the environment of such a market, we have identified those highlighted in Table 3.

– The stock market – the performance indicators (or "y") are the returns on transactions and the price of ownership stakes in a company. The return on stocks indicates how much money an investor has earned or lost from transactions over a specific period. It is an important indicator for investors because helps assess the investment's

Table 2

Characteristics of influencing factors formed considering the implementation of digital financial technologies in the government bond market

Factors ("x")	Influence of the FinTech factor	Expression of factor influence
Improving information accessibility	Rapid and convenient access to information about government bonds, such as quotes, yields, coupons, and maturity dates.	The number of platforms with digital solutions that can provide information about bonds, interest rates, and yield
Automation of government bond trading	Automation of the trading process for Ukrainian government bonds, facilitating faster and simpler buying and selling.	The number of users of algorithmic trading in government bonds.
Development of new products	Introduction of new financial instruments based on government bonds.	The number of platforms with digital solutions that will offer investors flexible and diverse investment opportunities.
Enhancing risk management quality	Automation of risk management processes to enhance the risk management system.	The number of operations using machine learning algorithms.

Source: formed based on [1; 4–5]

Table 3

Characterization of influencing factors formed with the integration of digital financial technologies in the promissory note market

Factors ("x")	Influence of the FinTech factor	Expression of factor influence
Improving information accessibility	Increasing the accessibility of information about promissory note issuers and financial condition. It can reduce investor risk and boost demand for promissory notes.	The number of platforms with digital solutions that can provide information about promissory notes.
Automating promissory note trading	Accelerating and simplifying the promissory note trading process.	The number of users of algorithmic trading of promissory notes.
Enhancing risk management quality	Improvement of risk management processes	The number of uses of machine learning algorithms for credit risk analysis and borrower reliability assessment.
Improving the promissory note issuance and circulation process	The promissory note issuance and circulation process can become faster, more efficient, and secure.	The number of promissory notes whose issuance and circulation are executed FinTech using.
Developing new promissory note formats	Focus on developing new promissory note formats, which can make them more accessible and user-friendly.	The number of electronic and other promissory note formats created based on FinTech
Increasing transparency and fraud protection	Optimization of the promissory note trading process.	The number of uses of digital signatures and blockchain technologies.

Source: formed based on [1; 5]

effectiveness in the stock market. On the other hand, the company share price reflects the market value of the company's stock based on investors' expectations regarding the issuer's prospects and growth potential. A high stock price can indicate that a company is producing its product effectively, growing and expanding, and generating significant returns for its shareholders. The profitability of operations and the stock price are used to evaluate the stock market performance. Among the influencing factors (x) on the performance indicators, as designated by us considering the FinTech integration in the environment of such a market, we have identified those highlighted in Table 4.

– The corporate bond market, short-term, medium-term, and long-term credit markets – the performance indicators (or "y") are the returns on transactions and the price of debt securities issued by private companies or for credit operations. The price of a corporate bond or credit is the current cost at which an investor can purchase the bond

in the market or the total cost of raising borrowed funds. The yield of a corporate bond or credit is the interest rate that the investor receives/the borrower pays annually from its purchase/raising. FinTech technologies can impact the performance indicators of the market, which can affect the price and yield of corporate bonds. Among the influencing factors ("x") on the performance indicators, formed considering the FinTech implementation in this market environment, identified those highlighted in Table 5.

– The international foreign exchange market – the performance indicator is the price and yield of transactions with currencies from different countries, which are part of such a market. The currency price in the international foreign exchange market depends on the demand and supply. The currency yield in the international foreign exchange market is determined by the change in the currency's price over a specific period (it can be either positive or negative, depending on the change in the currency's price over a specific period). Among the sets

Table 4

Characterization of the influencing factors formed with the integration of digital financial technologies in the stock market

Factors ("x")	Influence of the FinTech factor	Expression of factor influence
Increase in information processing speed and efficiency	Allow for the processing and analysis of information volumes in real-time, enabling the ability to respond to changes in factors influencing stock prices.	Increase in trade execution speed.
Automation of stock trading	Allow for the creation and utilization of complex algorithms for decision-making based on extensive data sets. This can enhance the accuracy of price forecasting.	Trading volume using automated stock trading, the likelihood of errors in the trading process, the number of users engaged in algorithmic stock trading.
Development of the digital assets/tokenized stocks market	Enable the acceleration and cost-effectiveness of the stock trading process, making it safer.	Increase in the number of issuers of tokenized stocks.
Development of online trading platforms	Allow the creation of user-friendly and secure stock trading platforms.	The number of secure online trading platforms for stock trading.
Enhancement of accessibility of operations for investors	Make the process of investing in stocks simpler and more accessible to investors with varying levels of knowledge and experience.	The number of real-time stock transactions, the number of platforms featuring a user-friendly interface and intuitive instructions.

Source: formed based on [5–6]

Table 5

Characterization of influencing factors formed with the integration of digital financial technologies in the corporate bond market

Factors ("x")	Influence of the FinTech factor	Expression of factor influence
Introduction of new financial instruments.	They can offer tools for investing in corporate bonds, such as blockchain-based bond investment platforms, which can increase demand for bonds.	The number of transactions conducted through blockchain-based bond investment platforms and algorithmic trading tools.
Automation of processes.	They can reduce servicing costs for bonds, leading to lower interest rates for borrowers and increased demand for their bonds.	The number of transactions conducted through process automation tools.
Increased accessibility of information.	Investors can have greater access to information about corporate bonds, increasing market transparency and investor trust.	The number of inquiries for information about corporate bonds on online platforms.
Development of new markets.	They can help companies attract investors from around the world, potentially opening new markets for corporate bonds.	The number of new investors attracted by FinTech companies in new corporate bond markets.
Diversification of investment strategies.	They can assist investors in diversifying their investment strategies, potentially increasing demand for corporate bonds.	The number of transactions using various investment strategies on FinTech company platforms.
Reduction of bureaucracy.	They can help streamline bureaucratic processes related to bond issuance and servicing, reducing costs for companies and investors.	The number of transactions conducted through bureaucracy-reducing tools such as digital signatures and electronic documents.

Source: formed based on [1; 4–6]

of influencing factors (x) on the performance indicators formed with the FinTech implementation in this market environment, identified those highlighted in Table 6.

– The currency market for medium- and long-term loans is characterized by the profitability of operations and the price of loans issued in various currencies for the medium and long term. The price and yield of these loans depend on market conditions and changes in exchange rates. However, among the sets of influencing factors (x) on the performance indicators formed with the FinTech implementation in this market environment, identified those highlighted in Table 7.

– The international bond market – the performance indicator (or "y") is the yield of transactions and the price of debt securities issued by various issuers. Among

the sets of influencing factors (x) on the performance indicators formed with the FinTech implementation in the environment of such a market, like those highlighted in Table 1 and Table 4.

– The market for precious metals – the performance indicator (or y) is the yield of operations and the price of various precious metals. The yield of such operations is calculated as the ratio of profit to investments. Another possible indicator could be the price of precious metals – it is the cost that a buyer is willing to pay to a seller for one unit of precious metal on a specific market at a specific point in time. Among the influencing factors (x) that are formed with the FinTech implementation in market environment, identified those highlighted in Table 8.

This is not an exhaustive list of factors that can

Table 6

Characteristics of influencing factors formed with the introduction of digital financial technologies in the international foreign exchange market

Factors ("x")	Influence of the FinTech factor	Expression of factor influence
The development of cryptocurrency technologies	They can lead to the development of cryptocurrency technologies and increase their attractiveness to investors. This can lead to a change in the demand structure for currencies and changes in exchange rates.	The number of international currency transactions made through cryptocurrency gateways
Increased market transparency	They can help increase transparency in the international currency market, reduce manipulation, and improve market efficiency. This can lead to reduced currency exchange rate volatility and increased trust in the market.	The number of transactions made through digital platforms and blockchain technologies.
Automation of transactions	Automating processes in the international currency market can reduce transaction costs. It can lead to increased market liquidity and higher participant activity.	The number of transactions made through process automation tools.

Source: formed based on [4; 6–7]

Table 7

Characteristics of influencing factors, formed with the introduction of digital financial technologies into the credit market

Factors ("x")	Influence of the FinTech factor	Expression of factor influence
Increased accessibility to credit	The ability to use automated processes, machine learning, and algorithmic analysis to reduce the time and costs associated with lending	The number of transactions conducted automatically through online platforms and mobile applications.
Improved loan disbursement speed	Can enable the automation of the loan origination process and expedite it.	The number of online applications, document scans, and machine learning for application processing and loan issuance.
Reduced credit risk	Can reduce lending risks by using analytical tools and algorithmic analysis to make lending decisions and determine a borrower's credit score.	The number of transactions conducted using analytical tools and algorithmic analysis.
Enhanced borrower experience	Can enhance borrowers' experiences by using online interfaces, mobile applications, and other digital tools.	The number of transactions conducted using digital tools.
Increased competition	Can introduce competition into the lending market by offering new products and services.	The number of loans with low-interest rates, blockchain-based loans, etc.

Source: formed based on [1–2; 5; 7]

Table 8

Characteristics of influencing factors formed with the implementation of digital financial technologies in the precious metals market

Factors ("x")	Influence of the FinTech factor	Expression of factor influence
Development of online trading in precious metals	They can help develop online trading in precious metals, which can improve accessibility and convenience for investors. This can lead to increased trading volumes.	The number of transactions conducted using online trading platforms.
Development of digital investment platforms	They can help develop digital investment platforms that allow investors to invest in precious metals.	The number of transactions conducted using digital currencies.
Development of artificial intelligence	They can help develop artificial intelligence for analyzing data on the precious metals market. This can help predict changes in the prices and yields of precious metals.	The number of transactions conducted using data analysis tools and methods for the precious metals market.

Source: formed based on [2; 6–7]

influence performance indicators in the precious metals market with FinTech integration, but these are some of the most significant ones.

Given the relevance of focusing on evaluating the transformations of Ukraine's financial markets under the influence of fintech on regression equations, from all the identified factors (x) in any set of key indicators, those are chosen which: are quantitatively measurable; closely related to performance indicators; are not multicollinear.

The general procedure for selecting factors (x) in the regression equation (xy) is classical. It considers the value (y) and the entire set of factors (x1...n) that significantly influence it.

The sets of key indicators formed above characterize the state of each market separately and all financial markets, considering the implementation of fintech. In doing so, it creates the possibility of accounting for uncertainty based on the use of scalar products of influencing factors on a specific financial market asset and changes in the price or yield of that asset (y).

To assess the transformations of Ukraine's financial markets under the influence of fintech, the following set of interconnected approaches and methods should be considered:

1. Determining the nature of dependencies and the values of random variations for each "x" based on their values in all other observations.

2. Implementing a step-by-step procedure for selecting factors to formalize the values of a regression model for transformations in financial markets.

3. Addressing uncertainty by constructing regression equations to assess transformations.

4. Evaluating the actual and future transformations resulting from the impact of fintech factors on Ukraine's financial market.

The particularity of this methodology lies in the fact that the primary focus of quantitative factor selection using

multifactor analysis of variance is devoted to testing the hypothesis of equality of means of the original controlled parameter (y) under different combinations of factors.

Conclusions from this study and prospects for further exploration in this area. FinTech is considered as various targeted means of influencing the financial sector, used by resident corporations in Ukraine, including quasi-corporations, whose main function is to provide financial services. It should be noted that these technologies themselves are not functional, but they create such functionality when integrated into various technological structures existing in the financial sector. It is precisely the processes of such integration that determine the forms of fintech-related transformations in financial markets, specifically their performance indicators (which are tied to the value of underlying assets).

According to the research, it is recommended to comprehensively present the forms of transformation in financial markets, specifically:

1. Through changes in the performance of conducting any monetary transactions using synthesized fintech. In this work, performance is considered as the abstract result of the operation of a specific financial services market or the result of the action of a function.

2. Through qualitative technological changes synthesized by fintech if they correlate with changes in performance. These transformations are equated to the actions of influencing factors, which are considered as the basis for changing the efficiency of financial services markets.

The prospects for further research are driven by the fact that a specialized set of key indicators, oriented towards a clear division of financial services markets into transformation zones, will characterize both the overall state of financial services markets and their specific elements, considering the integration of digital financial technologies (FinTech) based on regression analysis. Such opportunities are provided by regression analysis.

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