

UDC 336.763.54

doi: 10.15330/jpnu.9.3.65-77

## DEVELOPMENT OF INNOVATIVE TOOLS IN GLOBAL FINANCIAL MARKETS

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**Abstract.** The purpose of the article is to study the theoretical foundations and develop practical recommendations for improving the process of functioning financial instruments in global financial markets. The article reveals the essence and characterizes the components of the modern global financial market, defines its role in the development of the national economy, and the peculiarities of its formation in the conditions of the expansion of innovative digital technologies. The essence of financial market instruments is revealed and the need to improve their investment qualities to the requirements of modern economic conditions is argued. Financial instruments that are in circulation on the financial market are systematized according to several features. Considerable attention is paid in the work to the circulation of innovative financial instruments, the main feature of which is a high level of risk. Peculiarities of the formation and functioning of derivative financial instruments were studied, and the essence and specifics of the use of credit notes on the stock market were revealed. The mechanism of circulation of credit notes is presented and their main functional features are defined. It is noted that the issuance and sale of credit notes enable borrowers to mobilize funds on the global financial markets, and improve their investment image in the international market through the formation of a high credit rating from global financial institutions. The peculiarities of cryptocurrency circulation on the global financial market from the point of view of today's most popular innovative financial instrument are revealed; the authors emphasized the dual nature of cryptocurrencies, as it has the properties inherent in stock market instruments and features that characterize financial pyramids. The dynamics of the development of the global cryptocurrency market over a long period have been analyzed. The peculiarities and problems of regulating the circulation and taxation of cryptocurrencies in Ukraine and the world are highlighted. The formation and specifics of circulation on the domestic financial market of bitcoin derivatives as a new financial instrument are described. The authors also focused attention on the spread of negative trends in the circulation of cryptocurrencies and substantiated possible ways to overcome them. The article analyzes the functioning and development of the option certificates and derivatives market in Ukraine in terms of stock and over-the-counter markets. The main factors restraining their development include inadequate regulatory and legal support, the small size of the markets, and a small number of tools used in them.

**Keywords:** financial instruments, option certificates, financial engineering, cryptocurrency, bitcoin, credit notes, derivatives, financial market, globalization.

**JEL Classification:** D53, E44, E58, F15, F18, F21

## 1. INTRODUCTION

The international financial market plays a key role in increasing the efficiency of the functioning of the world economic system, as it facilitates the rapid redistribution of financial resources at the global level and helps direct investments to certain regions and types of economic activity.

The strengthening of globalization processes in the world financial market, the achievement of significant progress in the development of computer and information technologies and their application in the field of finance created the prerequisites for the emergence of innovative financial instruments that help attract financial resources more efficiently and stimulate the improvement of the investment climate in the national economy.

The creation of modernized instruments of the financial market is conditioned by the needs of its participants to respond adequately to modern trends in the international economy, to minimize the impact of uncertainty on investment decisions, to ensure the risks of adverse dynamics of prices for goods and services, to increase the effectiveness of conducting foreign economic activities, and to implement their speculative strategies.

In the conditions of a difficult socio-economic and political situation in Ukraine, the majority of business entities lack capital and are looking for additional sources of financing. The formation of prerequisites for the active use of domestic financial market instruments will help cover the deficit of financial resources among economic entities, as well as attract free funds for enterprises and the population to make capital investments in promising industries, projects, or programs. Today, the instruments of the capital market in Ukraine do not perform the functions assigned to them, which requires the government to implement an effective fiscal policy in the field of the stock market to increase the attractiveness of investments in securities. Given the above, the study of the peculiarities of the functioning of financial market instruments in the conditions of globalization is relevant and timely.

## 2. THEORETICAL BACKGROUND

Problems of increasing the effectiveness of financial market instruments in the conditions of globalization were highlighted in their works by the following domestic economists, in particular: Alekseienco (2016), Berdar & Kot (2020), Blinov (2020), Lavryk (2017), Onyshko (2018), Petruk, Novak (2020), Poliak (2016), Proboiv, Rohovska-Ishchuk (2018), Solodka (2017), Shevchenko (2012) and several others.

Considering the significant contribution of scientists to the study of the development of financial instruments on the market, not all its aspects are covered and sufficiently substantiated. Therefore, in the conditions of reforming the domestic economy, the problem of increasing the trust of business entities and the population in the institutions of the financial market, identifying the possibilities of introducing innovative financial instruments, finding ways to overcome the consequences of quarantine measures on the capital market of Ukraine, etc., need to be solved.

## 3. RESEARCH OBJECTIVE, METHODOLOGY AND DATA

The purpose of the article is to study the theoretical foundations and develop practical recommendations for improving the process of functioning financial instruments in global financial markets.

The methodological basis of the article is general scientific and special methods used to obtain relevant results: logical, abstraction, generalization, detailing, grouping, systematization, analysis

and synthesis, induction and deduction, statistical methods, comparison method, graphic methods, etc.

An important link of the financial system of any country is the financial market, which transforms the accumulation of the population and business entities into investment resources and distributes them between types of economic activity and branches of the economic system. It enables the government and business structures to increase the volume of funds without using internal own sources and crediting and acts as an intermediary between investors and economic entities. Today, the Ukrainian financial market is at the stage of development and works with insufficient efficiency and needs effective regulation by the state to improve the legal, financial, and organizational foundations of its functioning. Currently, the state of the financial market of Ukraine does not significantly meet the requirements of developed countries, does not satisfy the demand of investors and people who need financial resources, has low transparency in its activities, and the functioning of financial instruments is significantly limited.

The modern global financial market is characterized by a complex system of relationships between its subjects and a set of financial institutions that cooperate as financial intermediaries. Such interaction takes place intending to attract financial resources and make direct and portfolio investments using financial instruments. As the level of development of the financial market increases, a wider range of financial instruments, which contain the characteristics of innovation and effectiveness, are freely available on it. In the conditions of significant progress of computer technologies, the financial market was covered by the latest information systems, which significantly accelerated investment operations and increased the efficiency of the functioning of financial instrument markets on a global scale.

It is worth noting that the circulation of financial instruments on the market is a prerequisite for the activity of most financial institutions, as it helps to mobilize financial resources in a sufficient amount and contributes to their effective investment.

In our opinion, financial instruments should be understood as special goods or services on the market that have the form of an agreement and are used to mobilize funds by economic entities and authorities and obtain financial results or other effects by investors of financial resources. As a result of the sale of financial instruments, their owner acquires rights, and the issuer acquires obligations, that is, during the sale, they acquire the form of financial assets for the buyer.

The strengthening of globalization processes in the international economy is caused by the rapid technological progress of mankind and the increase in the capabilities of society and its institutions. Such development contributed to the activation of several processes that are characteristic of national economic systems, and long-term problems and the frequent occurrence of crises in the world economy significantly improved the investment characteristics of financial assets compared to real investment, which determined the financial behavior of intermediaries in the market. In the international economy, huge in scope and difficult to implement complexes of peace enterprises are conducted in the field of harmonizing monetary and budget-fiscal policies to common principles and bringing the legislation in line with these spheres of activity. The constant change in business conditions under the influence of external and internal factors requires improving the investment qualities of financial instruments, taking into account the innovative needs of investors and increased performance requirements.

International financial markets in the conditions of globalization are characterized by a high degree of the interweaving of informational and financial components to increase the investment efficiency and competitiveness of financial companies and institutions. Concepts of instability of markets, innovations in the financial sphere, and management of a portfolio of financial assets require improvement taking into account progress in the information sphere. In modern economic literature, the concept of "financial innovation" is interpreted from the point of view of the creation of financial goods or services that were not in circulation before; the application of the latest

computer and information technologies in the organization of the circulation of financial products; development of progressive methods of servicing financial operations, etc. In general, financial innovation is understood as modernized tools and technologies in the field of finance, the introduction of which will activate the activities of financial corporations and help increase the efficiency of their functioning.

Financial market instruments are classified into those that implement the theory of insurance with the help of future contracts and securities in combination with information networks, which are created for their purchase and sale to increase the effectiveness of investment processes.

Common financial market instruments include cash management brokerage accounts, interest rate swaps, convertible bonds, and more. The economic content of financial engineering is a combination of conventional and the development of modernized financial market instruments to improve the process of mobilizing additional financial resources, reducing risks by using insurance against adverse price changes (hedging) based on the adoption of effective management decisions regarding the development of key elements of innovative financial instruments.

Hybrid instruments of the global financial market include structured financial assets, which are a combination of currency and physical products. Structured financial market assets are usually defined as a combination of traditional securities and forward contracts: shares and futures, bonds and options, government securities and derivatives, etc. Synthetic financial instruments, which are a combination of derivatives and shares or bonds, have gained considerable popularity in the international economic system. The use of exotic instruments in the stock market (derivative financial instruments on weather conditions, derivatives on financial indicators, investment agreements, etc.) is a promising direction for the development of the international financial market in the conditions of globalization.

Innovative financial instruments are term contracts created during the specific interaction of financial market participants in the field of innovation.

According to the Bank for International Settlements, the total volume of derivative contracts concluded without intermediaries in 2018 amounted to 556.4 trillion dollars. The USA with a total market value of 26.6 trillion dollars. The USA derivative securities are securities that certify the right of the owner in the cases and procedures specified by the prospectus to demand from the issuer the purchase or sale of the underlying asset and/or exercise the rights established by the prospectus regarding the underlying asset and/or make payment(s) depending on the value of the underlying indicator and/or provide for the emergence between the owner and the issuer in the cases determined by the issue prospectus of new legal relations under the derivative, the terms of which are defined in the issue prospectus (except for securities that give their owner the right to exchange such securities for other securities). In Ukraine, in 2012, the volume of trade in derivative securities reached its maximum value of UAH 24.9 billion, and in 2018, it reached its minimum value of UAH 2.71 billion. Note that almost all operations were carried out in the exchange segment of the market (Official website of the National Securities and Stock Market Commission, 2020).

A key feature of innovative financial instruments is a significant level of risk, which requires the development of regulatory and methodological recommendations in the process of managing them, which will allow making appropriate calculations and avoiding the consequences of a high degree of uncertainty in the stock market situation.

Recommendations that make it possible to take into account the situation in the area of risk include correct positioning, compliance with limit restrictions, gradation of investment objects, a delegation of powers to financial intermediaries, simplification during the analysis of influence factors, taking into account the maximum of information sources, obtaining income and other benefits by the level of risk incurred.

#### 4. RESULTS AND DISCUSSION

In the conditions of strengthening globalization processes in the world economy, an important source of mobilization of financial resources is the use of loan instruments on the financial market. Investing money in such securities requires an adequate analysis of the level of investment risk, which is carried out using reliable credit ratings of well-known agencies and with the involvement of our financial analysts. The consequences of underestimating this risk can be the bankruptcy of the company, so it must be analyzed using absolute and relative values (mathematical expectation, standard deviation, covariances, determination of confidence intervals, etc.) and with the involvement of several stochastic models of probability theory in the calculations. However, the global financial crisis of 2008 showed analysts the need to take into account a large number of factors and use modern reliable time models for assessing investment risks in the process of analyzing the reliability of financial instruments on the global market. Conventional models of risk analysis use a rather long period, which is measured in years, while in today's tough conditions of the functioning of the securities market, important changes occur every day, which must be taken into account to prevent significant losses from uncertainty. Such a situation requires the practical application of such financial instruments like forwarding contracts (derivative financial instruments or derivatives) to provide insurance against unwanted price changes. Credit notes are one of the types of derivatives that will help to adequately assess financial risks and contribute to increasing the real value of assets.

A credit note (CN) is one of the types of financial instruments of the securities market, payments under which are made by the occurrence of a certain credit phenomenon, i.e. the rise or fall of the credit rating of a certain business entity or several financial assets on the global market. Credit notes are effectively a guarantor or insurance instrument against losses due to changes in the credit rating of their owner. The issue of this security is almost identical to the issue of Eurobonds.

Credit notes are a debt term contract based on loan obligations, which are the underlying asset of this derivative. With the help of such a derivative financial instrument, the creditor can significantly reduce loan risks by redistributing them to depositors, i.e., those who have purchased CN. Credit notes themselves play the role of an instrument of securitization of credit obligations.

The organization of the circulation of credit notes stipulates that the financial intermediary (underwriter) charges the creditor the interest and principal debt for the loan, taking into account the amount paid by the borrower (from the remaining debt). At the same time, the financial intermediary transfers the interest to the depositor, the amount of which is specified in the agreement on credit notes. Note that under such a contract, the loan transaction covers two elements: the insolvency of the underlying asset (loan obligations) and the insolvency of the debtor. If one of the specified events occurs, during the period specified in the credit note contract, the actual amount of the loan obligations are paid (the nominal amount of the obligations minus the incurred losses). In the opposite situation, repayment of loan obligations is carried out according to the nominal amount. Taking into account the specified characteristics of the functioning mechanism of credit notes, it is worth noting that depositors assume a double risk: insolvency of the underlying asset (credit obligations) and bankruptcy of the debtor. However, investors have the opportunity (defined by law) to present their claims only to the financial intermediary underwriter (Fig. 1).

Scientists positively assess the ability of credit notes to be an effective financial means of reducing the debt risks of financial and credit institutions, usually banks.

Issuance and sale of CNs enable borrowers to mobilize funds on global financial markets and improve their investment image in the international market through the formation of a high credit rating from global financial institutions. From another point of view, the operation of CN does not

create prerequisites for establishing the real price of loan capital, since they are sold publicly at open auctions.

The main functional characteristics of the financial institution as a tool for mobilizing financial resources on the world's global stock markets include adaptability to market conditions of business; the real price as a result of the interaction of supply and demand on the financial market; decrease in the price of debt capital in the long-term period. However, the specified features of such derivative financial instruments can be effectively applied under stable dynamics of the country's macroeconomic indicators, slight fluctuations in the price of debt capital, and small loan spreads. Given the situation inherent in the economy of Ukraine, domestic and foreign investors are more interested in investing in highly liquid financial instruments characterized by a low level of credit risk. In addition, today in the national economy there is a low level of banking activity in the field of lending to economic entities, therefore the use of credit notes has not acquired the appropriate level of development in the Ukrainian financial market.

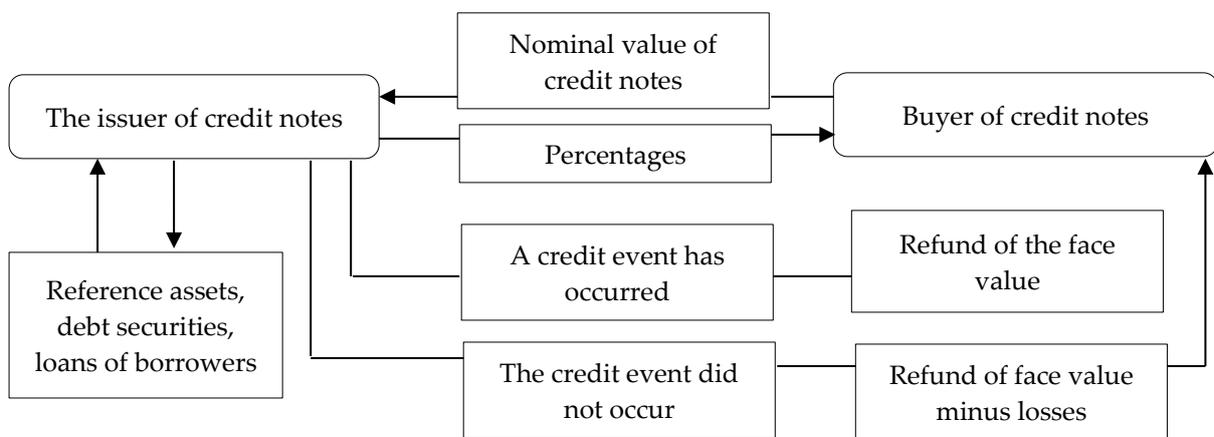


Fig. 1. Mechanism of operation of credit notes

Source: Solodka, 2017

Such a tool of the global financial market as cryptocurrencies has gained extreme popularity in recent years. In economic literature, domestic and foreign scientists today cannot agree on the economic essence of cryptocurrency, and a large part of scientists believe that it has all the signs of a financial pyramid. The regulatory and legal regulation of the circulation of this financial instrument differs significantly in different countries of the world, which makes it impossible to stimulate or restrain its development at the international level. At the beginning of 2021, the exchange rate of cryptocurrencies broke new records in the upward trend, which became a prerequisite for the creation of innovative derivative financial instruments - futures contracts for cryptocurrencies. The first such derivative was futures contracts with the underlying asset in the form of bitcoin. However, in the second quarter of 2022, the bitcoin rate fell significantly below 20,000 US dollars per unit, which called into question the investment in such financial instruments, and their operation began to be associated with financial pyramids.

A sharp increase in the market value of cryptocurrencies in the world was traced exponentially with upward trends in 2017-2018. In the first quarter of 2014, the total market value was about 4 billion US dollars, and already in the next 2017 – about 18 billion US dollars. 2018 was marked by a huge increase in the value of cryptocurrencies to the level of more than 700 billion US dollars. After this period, the dynamics of these financial instruments were unstable and changeable until the end of 2020, when they began to demonstrate extremely high growth rates (Fig. 2).

The growth of the market value of cryptocurrencies in the last few years is in the range of 100 to 400 billion US dollars, which is almost half a percent of the world gross product and almost two

percent of the volume of international trade. However, starting from April 2021, this indicator significantly decreases, and in the second half of the year, it increases to a mark of more than 2.6 trillion US dollars. It should be noted that in the first half of 2022, the specified indicator will gradually decrease several times and at the end of June will amount to 871 billion US dollars.



Fig. 2. The total market capitalization of cryptocurrencies in the world

Source: <https://cutt.ly/nNjhFog>

The functioning of cryptocurrency in the international economy is accompanied by the following specifics: lack of legal support for the issuance and use of cryptocurrencies in many countries of the world; the peculiarities and universalization of taxation of income received from ownership of such financial instruments are not clearly defined; the dynamics of the exchange rate of cryptocurrencies is accompanied by variability and uncertainty, and the lack of guarantees and collateral significantly increase the level of risk of their use; limited information and not a high level of investment education of the population create prerequisites for forming the image of the crypto-currency as a speculative tool on the global financial market, which, in the course of sharp fluctuations, makes it possible to obtain fairly high profits; cryptocurrencies today are an innovative product that require specific approaches to promotion on the international financial market; such financial instruments are components of the peer-to-peer payment system, which were formed as a result of Industrial Revolution 4.0 with the use of non-fiat monetary units and various types of specific assets by large social groups.

Given what has been said, today we can confidently state the emergence of a new modernized form of currency, which additionally includes a specific digital component (besides cash and records on accounts), which makes them a unique financial asset. At the same time, cryptocurrency includes the characteristics of the types of money known before its appearance, and each electronic digital currency has its uniqueness and is recognized by modern information technologies regarding its owner and circulation chain.

It is worth noting that the circulation of cryptocurrencies in the world encounters many contradictions on its way, and the world financial institutions and the governments of the leading countries have not yet reached an agreement on the interpretation of their essence and, usually, can define them from opposite points of view and make radically different decisions on their regulation use in the national economy.

The mechanism of circulation of cryptocurrencies in the domestic and international economic system today is not regulated at the legislative level, and legal scholars describe several features of the legal basis of its functioning:

- an inferior currency substitute by the definition of the NBU;
- the European Court of Justice defines it as a means of payment, that is, cryptocurrency should be considered a monetary unit, and not an ordinary commodity;
- in the Draft Law "On Stimulating the Development of Cryptocurrencies and Their Derivatives in Ukraine", which was withdrawn in 2019, cryptocurrency is defined as a financial market tool;
- the European Central Bank defines the electronic monetary unit as a commodity, and the concluded contracts for its trade as agreements on the purchase and sale of goods.

In the domestic economic literature, there are views regarding the classification of cryptocurrency as innovative financial instruments that have an electronic form of circulation and reflect its purchase and sale in the balance sheet of a business entity form<sup>1</sup> in the article long-term or current financial investments by the purpose of purchasing such a financial asset.

The NBU also reacted to the spread of cryptocurrency circulation in the Ukrainian economy jointly with the National Commission for Securities and the Stock Market and the National Financial Service (the latter was liquidated at the end of 2020, and the functions were transferred to the central bank) with a statement that stated that the complex and contradictory legal basis for the functioning of cryptocurrencies is not making it possible to determine them by foreign or national currency, monetary means, electronic means of payment, financial instruments or money substitute.

Then attempts were also made to legislatively regulate the circulation of cryptocurrency, as a result of which both draft laws submitted for consideration to the Verkhovna Rada of Ukraine were withdrawn, therefore the problem of recognition and regulation of the operation of these partially recognized financial instruments in the domestic economy today remains unresolved, and their application in the legislative levels is unacceptable.

A significant disadvantage of such a situation is the impossibility of taxing operations with cryptocurrencies, which generates significant losses and supports the interpretation of their essence as a speculative instrument of the financial market.

At the end of 2016, the Ukrainian Stock Exchange launched Bitcoin derivatives (futures) trading in the world, which took place based on the settlement principle, i.e. after the end of the trading, money was transferred from the losers to the accounts of the winning participants. Accordingly, bitcoins were not given to anyone.

Investments in Bitcoin-based derivatives are made to obtain speculative income, but such investments require a significant initial margin compared to conventional financial market derivatives. It is advisable to involve experienced financial intermediaries in the evaluation of the market of such volatile financial assets, whose wages can become a fairly significant expense item even for successful business entities. It is appropriate to recognize that the dynamics of the value of cryptocurrency and futures contracts in which it is the underlying asset are often influenced by subjective factors, since the increase in its supply by large financial traders can significantly turn the price movement of such derivatives in another direction, and minor investors in the market in such a situation suffer significant losses.

The invention of the newest financial instrument in the form of cryptocurrency has provoked great interest from potential investors, as the mechanism of its circulation is based on an innovative blockchain system, which is independent and reliable without centralized issuance and commission payments in the process of transferring funds between digital wallets.

Throughout the history of their circulation, cryptocurrencies have acquired the following negative features: they have become a tool for investing resources in terrorist activities, they are used to violate tax legislation and non-payment of mandatory payments, constant cyber-attacks on

digital wallets, and they have no material value, significant volatility of the market rate, etc. Such a situation requires the governments of countries around the world to develop an effective policy for regulating the circulation of cryptocurrencies to overcome their negative consequences since it is impossible to completely avoid their use in one or another state.

Derivative financial instruments, in which the underlying asset is cryptocurrencies, are usually used for speculative purposes, so they are characterized by significant fluctuations in value and, as a result, great uncertainty. In addition, such instruments require a large amount of investment to allow transactions with them relative to the cost of conventional financial derivatives. It is worth noting that in the national economy there are no direct bans on the use of these financial instruments, and the legal basis for their circulation on the domestic stock market is not defined.

Financial engineering products are in significant demand by multinational banks, as they help them to withstand competition and gain certain advantages in the market due to more effective investment of assets. Derivatives, as innovative products of financial engineering, are highly popular in the developed countries of the world and are an important element of the international capital market. The market of derivative financial instruments has significant opportunities in the field of management of investment resources, as it makes it possible to neutralize the risks of adverse price fluctuations in the market and rationalize the financial flows of economic entities with minor expenses. Derivatives help to form an effective capital structure for investors, which involves minimizing financial risks, maximizing the level of financial profitability, significantly reducing the average cost of financial resources, and increasing the effectiveness of the financial policy of the business structure in general.

Forward contracts as modernized instruments of the financial market are created during the innovative activity of business entities on it, and their economic meaning must be interpreted given the basic assets embedded in them. The value of derivative financial instruments depends on the price of the underlying assets. The most popular derivatives in the world are forward and futures contracts, options, and swaps. Innovative types of forwarding contracts include the following key features: property rights are declared in the form of stock instruments, a rapid increase in the volume of the derivatives market, and globalization of the financial market.

It is worth noting that the domestic market of derivative financial instruments progresses rather slowly and is small in size and uses few types of forwarding contracts, which are used to ensure against unwanted price fluctuations and build up financial results. In the international financial market, derivative financial instruments enjoy considerable trust among their subjects, the reason for this is the high liquidity of derivatives in 2019 and 2020, and about 80% of market participants expect an improvement in this trend in 2022. More than half of financial market entities use innovative tools to implement their investment strategy.

Currently, the Ukrainian derivatives market does not show a positive global trend, but, on the contrary, has a decreasing trend. Thus, as of the end of 2019, by the report of the NKCPFR, no issues of option certificates were registered, in 2018, 1 issue of option certificates was registered for a total amount of UAH 55.5 million, which is UAH 23 million more compared to 2017 and UAH 143 million less compared to 2016. However, at the end of 2019 and 2020, the Commission did not register the issuance of option certificates. (Fig. 3) (Berdar & Kot, 2020).

The volume of derivatives trading in 2020 amounted to UAH 3.05 billion, and its share of the total volume of trading on the securities market was 0.03%, which decreased to UAH 285.56 billion in 2020 (Fig. 4)

The data in Figure 4 demonstrate a tendency towards a decrease in the volume of derivatives trading on the securities market of Ukraine by UAH 2.82 billion for the period 2015-2020 and a significant increase in 2020 by UAH 2.83 billion compared to 2019. A gradual increase in the volume of trades on the securities market (by UAH 222.91 billion) occurred at the end of 2020, which generated positive trends in the economy (<http://www.nssmc.gov.ua>)

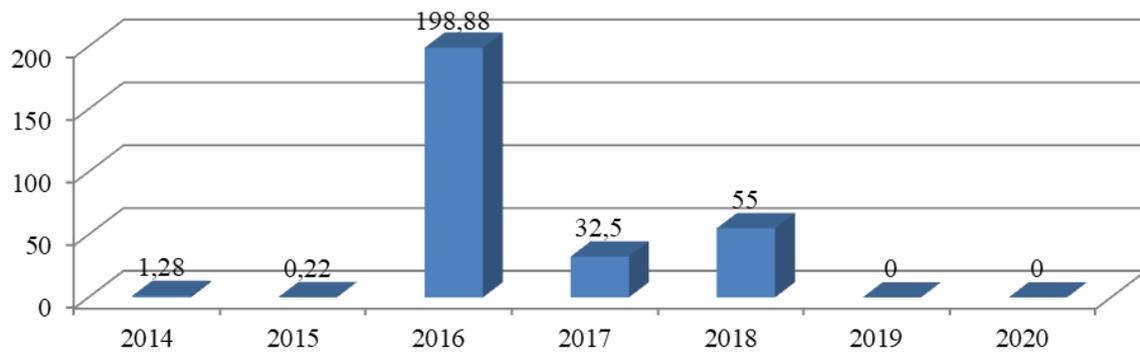


Fig. 3. The volume of registered issues of option certificates in 2014-2020, UAH million

Source: constructed by the author based on the source <http://www.nssmc.gov.ua>

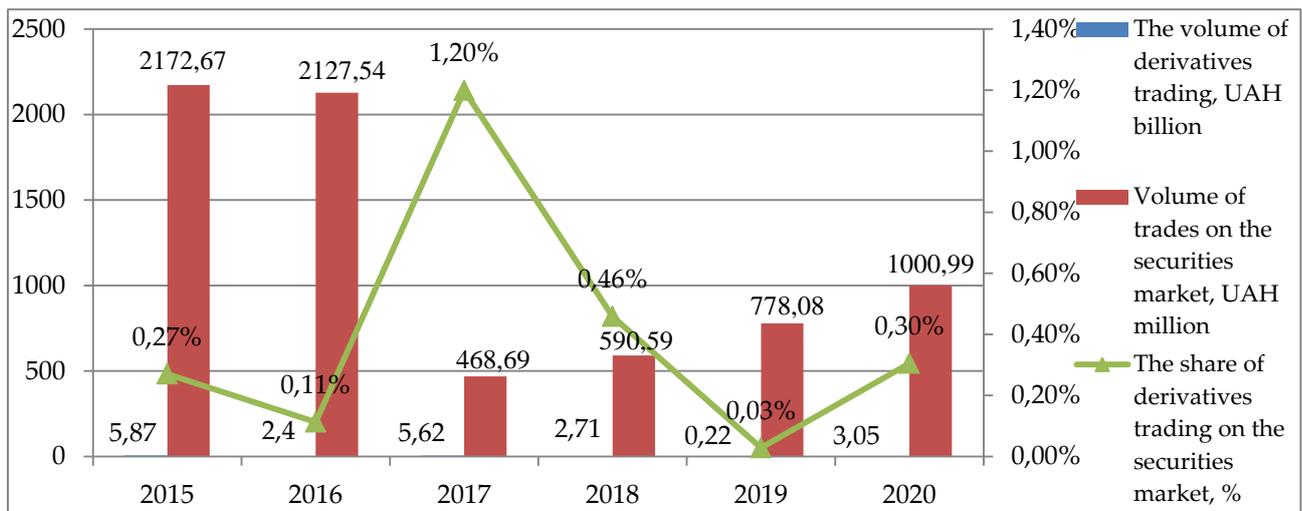


Fig. 4. Volumes of derivatives trading on the securities market during 2015-2020

Source: constructed by the author based on the source <http://www.nssmc.gov.ua>

The study of the peculiarities of the functioning of the domestic market of derivative financial instruments gives reasons to state the fact that the lion's share of trades takes place on the organized market, and the over-the-counter market is in its infancy (Fig. 5).

As for the activity of stock exchanges in Ukraine, in 2019, the volume of exchange contracts with derivatives amounted to UAH 205.18 million, which is UAH 592 million less compared to 2018, and UMEX, its volume increased and amounted to UAH 4.36 million. against UAH 0.03 million in 2018 (Berdar & Kot, 2020).

Note that today the national market of futures contracts is a fairly young sector of the financial system, which is the reason for the negative trends in its parameters. However, an important signal of the development of this market was the adoption of the Law "On Capital Markets and Organized Commodity Markets", which was adopted thanks to Ukraine's cooperation with the IMF and aims to stimulate the development of the Ukrainian market of innovative financial instruments. However, the adoption of this law is only the first step in the field of ensuring the regulatory framework for the regulation of the futures contract market, so it is rather difficult to outline the prospects for the development of this most popular tool of financial engineering in the world. Today, many legislative documents regulate this market and they contradict each other and contain significant omissions, and do not take into account the experience of developed countries regarding the organization of the derivative financial instruments market.

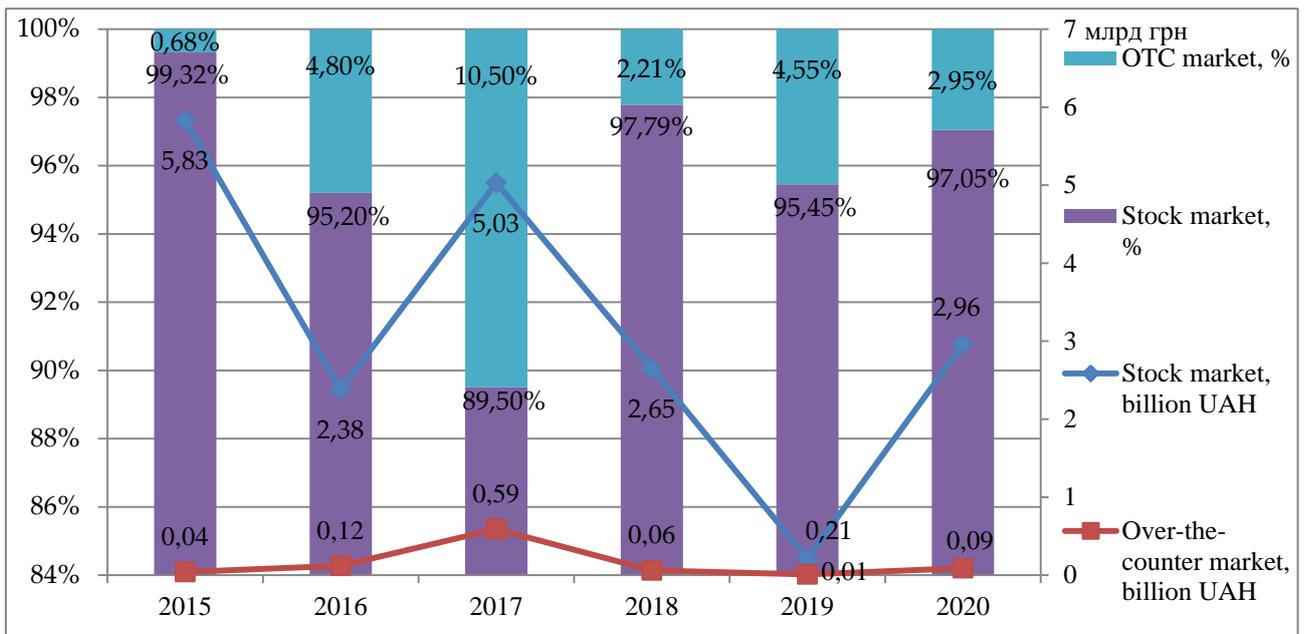


Fig. 5. The volume of derivatives trades in the section of exchange and over-the-counter markets during 2015-2020  
Source: constructed by the author based on the source <http://www.nssmc.gov.ua>

Therefore, today the derivatives market does not defend the interests of the development of the domestic economic system and does not realize its main function – insuring the risks of the subjects of the global financial market against adverse changes in the price of basic assets using concluding forward agreements. The main factors restraining the development of this market are inadequate regulatory and legal support, the small size of the derivatives market, and the small number of instruments used in it.

## 5. CONCLUSION

In view of the above, the main directions of activating the development of the derivative financial instruments market in Ukraine are: development and approval of regulatory and legal support adequate to the current economic situation, taking into account the experience of the leading countries of the world; regulating the relations of market subjects by defining the main rules and models of concluding contracts; market progression due to the introduction of effective concepts and investment risk management models; creating favorable conditions for the formation and development of capital market infrastructure and increasing the level of liquidity of term contracts; leveling off the impact of negative external factors on the reliability of the derivatives market, which would ensure that calculations are carried out under any economic conditions; increasing the financial literacy of financial market participants, which will enable them to conduct a reliable analysis of financial indicators; restoration of investor confidence in economic entities, state institutions and financial instruments in general, which will help improve the investment climate in general and attract free accumulation of enterprises and the population to the capital market.

The formation and development of the market of innovative financial instruments in Ukraine will help to increase the efficiency of the functioning of the corporate financial and non-financial sectors, as it will simplify their conditions for mobilizing financial resources in a sufficient amount and help to create an effective financial risk management system.

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**Received:** August 25, 2022; **revised:** September 19, 2022

Данилків Христина, Дропа Ярослав, Петик Марта, Гембарська Наталія, Сірик Зіновій. Розвиток інноваційних інструментів на глобальних фінансових ринках. *Журнал Прикарпатського університету імені Василя Стефаника*, 9 (3) (2022), 65-77.

У статті розкрито сутність та охарактеризовано складові сучасного глобального фінансового ринку, визначено його роль у розвитку національної економіки та особливості становлення в умовах експансії інноваційних цифрових технологій. Розкрито сутність інструментів фінансового ринку та аргументовано необхідність поліпшення їх інвестиційних якостей відповідно до вимог сучасних умов господарювання. Систематизовано фінансові інструменти, які перебувають в обігу на фінансовому ринку, за низкою ознак. Значну увагу у роботі приділено обігу інноваційних фінансових інструментів, головною ознакою яких визначено високий рівень ризику. Метою статті є дослідження теоретичних засад і вироблення практичних рекомендацій щодо удосконалення процесу функціонування фінансових інструментів на глобальних фінансових ринках. Досліджено особливості становлення та функціонування похідних фінансових інструментів, розкрито сутність та специфіку використання кредитних нот на фондовому ринку. Подано механізм обігу кредитних нот та визначено головні їх функціональні ознаки. Зазначено, що емісія та продаж кредитних нот дає змогу позичальникам мобілізувати грошові кошти на світових фінансових ринках, поліпшувати інвестиційний імідж на міжнародному ринку за допомогою формування високого кредитного рейтингу від світових фінансових установ. У роботі розкрито особливості обігу криптовалюти на світовому фінансовому ринку з погляду найпопулярнішого сьогодні інноваційного фінансового інструменту; авторами зроблено наголос на подвійну природу криптовалют, оскільки вона має властивості, що притаманні інструментам фондового ринку, та ознаки, якими характеризують фінансові піраміди. Проаналізовано динаміку розвитку світового ринку криптовалют упродовж тривалого періоду часу. Висвітлено особливості та проблеми регулювання обігу та оподаткування криптовалют в Україні та світі. Описано становлення та специфіку обігу на вітчизняному фінансовому ринку деривативів на біткойн як новітнього фінансового інструмента. Авторами також сконцентровано увагу на поширення негативних тенденцій в обігу криптовалют та обґрунтовано можливі напрями їх подолання. Проаналізовано функціонування та розвиток ринку опціонних сертифікатів і деривативів в Україні у розрізі біржового та позабіржового ринків. До головних чинників, які стримують їх розвиток віднесено: неналежне нормативно-правове забезпечення, невеликі розміри ринків, незначна кількість інструментів, які на них використовують.

**Ключові слова:** фінансові інструменти, опціонні сертифікати, фінансовий інжиніринг, криптовалюта, біткойн, кредитні ноти, деривативи, фінансовий ринок, глобалізація.