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The use of financial instruments: European experience and lessons for Ukraine

Abstract. This topic is relevant for the current study of the financial situation in general, and the derivatives market in particular. In this context, it is also important to outline the degree of state support for the development of the derivatives market, having previously identified the priority areas of state activity in this area. The current development of global financial markets indicates their growing efficiency and increasing role of international capital markets in attracting credit resources. The purpose of the article is to study, evaluate and analyze financial instruments, their impact on the national economy, as well as problems in the introduction of new financial instruments. The article summarizes and analyzes foreign experience in the use of financial instruments on the example of EU countries. The most effective methods of state regulation of financial instruments that can be applied in Ukraine are demonstrated. The dynamics of changes in financial instruments used in the Ukrainian financial market is investigated. The importance of using financial instruments in the Ukrainian economy is substantiated. The article identifies the most important problems and suggests methods and ways of more efficient functioning of the studied market. It is proved that to increase the country's competitiveness in the world financial market it is necessary to develop new financial instruments. The data on the use of financial instruments along with their grouping for 2013-2021 are systematized. It is necessary to further strengthen the tendencies of providing various types of financial support for regional development. In the future, it should also be taken into account that an indispensable condition for sustainable and effective regional development is institutional support, first of all, it is about regional development funds, which provides for an increase in the budgetary self-sufficiency of the regions. Thus, the coordinated activity of the financial system in a harmonious and professional combination of its functions is possible with the assistance of the state apparatus and a developed financial market

Keywords: market of derivative securities; derivative security (derivative); swap; option certificate; futures contract; EU countries; state regulation

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INTRODUCTION

The availability of financial instruments for regulating the national economy provides grounds for their more detailed study and determination of their beneficial impact on state's economy. In the post-crisis period, it is important to study the impact of stock market instruments on the national economy, which is the most attractive sector of the financial market for Ukrainian households. The global financialization, which appears in the growth of speculative trends in financial asset operations, has led to the emergence of new financial instruments. In context of Ukrainian economy reforming, subjects of the financial system are experiencing a shortage of resources; at the same time, the population and business entities have a significant amount of foreign exchange savings, which, if the financial market operates effectively, can be transformed into investment, and the financial instruments themselves must satisfy investors' to redistribute GDP and regulate the activities of business entities and households. In this regard, the government needs to pursue policies to promote the development of the domestic financial market, which will enable to overcome the shortage of capital in the national economy.

The rapid development of the financial market in the global context, active work of subjects of economic relations in the stock market and the desire to reduce risks have led to the emergence of derivative securities that help financial market participants to improve financial, monetary and commodity risk management and promote the development of financial innovations. Market instruments derivatives in economically developed countries are actively used to hedge and manage financial risks.

In today's conditions, it is absolutely obvious that Ukrainian researchers need to be aware of global trends and ensure that the development of the Ukrainian financial market conforms to global trends.

Among the scientific works on this research topic over the last 5 years, the following should be highlighted.

In particular, R. Brown & N. Lee (2018) investigated use of financial instruments in regional and local economic development.

O.V. Tretyakova *et al.* (2020) consider the main directions of modernization and development of the Ukrainian stock market.

O.V. Tymoshenko & L.O. Hudyma (2020) consider the main problems that stand in the way of improving the functioning of the stock market.

O.V. Yaroshevska (2020) classified the factors that stand on the way of the development of the derivative financial instruments market and are the reasons for insufficient involvement of investors in this segment of the national economy.

Art. 94 of Special Regulations for Trading in Financial Instruments, Savings and Investment Insurance separates and examines "Non-Complex Financial Instruments" and "Complex Financial Instruments" (ING Group, 2018).

Given the relevance of this topic, it is worth noting that the purpose of the article is to research, evaluate and

analyze financial instruments, their impact on the state of the national economy, as well as problems in the implementation of modern financial instruments.

LITERATURE REVIEW

First of all, it is important to note that the National Bank of Ukraine, as the central bank of Ukraine, defines the concept of financial instruments and indicates that financial instruments can be considered as securities, monetary instruments, futures and forward contracts, interest rate, currency and index swaps, options, which allow to sell or purchase any financial, including monetary instruments (currency and interest rate options) (Law of Ukraine No. 3480-IV..., 2006).

According to L.T. Byrne (2014) accounting standards for financial instruments needed a much more extensive remodeling.

R. Brown & N. Lee (2018) pay attention to the growing use of financial instruments in regional and local economic development. Researchers emphasize the importance of state and venture capital, government loans, and credit lines.

C.C. Ashford (2011) found that the discrepancy between the valuation of financial instruments at fair value and non-financial items based on historical value explains the existence of economic logic in establishing the boundary between financial instruments and non-financial items.

S. Adznan & S.P. Nelson (2014) expanded their study of the capital market. Scientists have found that modern changes in business settings direct companies to conduct business at the international level, and this, in turn, requires the use of financial instruments.

G.R. Stephen (2011), based on research on financial reporting for financial instruments, summarized empirical research on bank loan loss accruals, amortized and fair value measurement bases, balance sheet provision of financial instruments with concentrated risk, such as retained residual securities, disclosure information about risks, derivatives, and outlined future principles of empirical research on these issues (addresses the required disclosure of information about risk disclosures related to financial instruments in financial reports under GAAP and SEC rules).

According to the accounting standard in the European Union adopted in 2005 'financial asset' is any asset that is: a contractual right; equity instrument of another enterprise; cash; or a contract that will or may be settled by the entity's own equity instruments. But it should be noted that financial instruments also include risks, namely: inflation risk, currency risk, interest rate risk, market risk, counterparty risk, liquidity risk, country risk, law risk, settlement risk. Thus, financial instruments can be considered as contracts which lead to the emergence of a financial asset of one entity and an equity instrument or financial liability of another entity, and may be classified as primary financial instruments (such as equity securities, as well as payables or receivables) and derivative financial instruments (A guide to accounting for financial instruments in the public sector..., 2011).

According to European Union and the Committee of the Regions (2017) of financial instruments using has been increasing over the last two decades. A pioneer in Europe in using financial instruments was the UK, which introduced a rationalization of the public sector based on theories of allocative efficiency stemming from principal-agent theories by economists such as Stiglitz (1987).

According to the innovations, Member States and managing authorities have the possibility to apply FI to all thematic objectives covered by Operational Programs, as long as they are able to justify them to the Commission in the ex-ante assessment as stipulated in the regulations (International Financial Reporting Standards, 2018).

Concentration on local governance is a key issue in the Cohesion policy for 2014-2020. The main goal of this Program was to strengthen the independence of individual cities by allocating at least 5% of resources for the implementation of this system. These are, above all, demographic, ecological, climatic, social and economic challenges, which should have a significant impact on territorial municipalities, taking into account the need to promote stable links between the city and the countryside (European Union, 2015).

According to EU Cohesion policy legislative package 2021-2027 the €47.5 billion of additional resources will be made available from the EU Recovery Instrument, Next Generation EU. ERDF and CF funds will make 234 billion euros of investments in regional associations of the European Union (191 billion euros of ERDF and 43 billion euros of CF, respectively) (European Commission, 2020).

R. Roca *et al.* (2017) pay attention to the crisis of 2007-2008, and regard that too many difficulties in using of instruments of financial influence on the economy, as well as the opacity of setting prices on the financial market of securities as one of its main reasons, and subsequently, the various downturns in the economy caused a radical reduction in liquidity and a collapse in prices in the financial sector.

P. Vaičulis (2011) highlights the role of financial instruments used in the financial market of Lithuania, and also examines the most important parameters of the structure of financial instruments based on the study of comparative and historical data. Author argues that presently, the financial instruments used in Lithuania are equities, debt securities and derivatives and structure of investors has two groups – households and non-households.

D. Moravchykova *et al.* (2017) study the main aspects of innovation policy and technology transfer in the EU in general, and in Slovakia in particular in the period 2014-2020. First of all, the scientists described some legal and financial mechanisms for introducing innovations in this context. Also, the researchers point to the existence of some barriers, but also opportunities in the issue of introducing innovations and in the process of technology and knowledge transfer in the state economy. The authors also concluded that the European funds involved in the policy of support and implementation of the economic and social development programs of the European Union are divided

into: the European Regional Development Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development, the European Maritime and Fisheries Fund, the European social fund. The EU allocated a budget of 80 billion euros for the implementation of this program, which makes this project one of the most important financial initiatives of the EU. The peculiarity of this program is its novelty regarding the combination of a comprehensive innovation cycle, starting from fundamental and applied research through testing and demonstration activities, to the complete preparation of new products and their final placement on the market. The “Horizon 2020” program defined “International cooperation” as cooperation with non-EU countries. About 5% of countries outside the EU participated in this Framework Program, among which can be named: Brazil, China, Ukraine and the USA.

It should also be noted that to replace “Horizon 2020” a new EU initiative program “Horizon Europe” for the period 2021-2027 was adopted, which provides for an increase in funding for science, for which more than 1 trillion euro will be allocated.

The EU also adopted “A European Green Deal” with a budget of 1 trillion euros with the aim of turning Europe into the 1st climate-neutral continent in the world by 2050 (European Commission, 2014).

M.C. Huian (2015) concludes that the best tools to use for forecasting the market are precisely financial assets, compared to financial liabilities. The researcher also noted that when determining the price of shares of unprofitable companies, investors more often rely on non-financial liabilities European Union and the Committee of the Regions, and non-financial assets. In addition, when determining share prices, it is financial instruments that are more important.

According to statistics on financial instruments provided by European Parliament Commission in the period 2014-2020, the budget allocated almost 9 billion euros for the development of financial instruments, which is a significant amount compared to other expenditures in this area (European Union and the Committee of the Regions, 2017).

N. Dumitru (2017) explores the importance of financial instruments in the context of Cohesion policy for 2014-2020 and the goal of the EU’s “Europe 2020” strategy. The author points out that in the studied period, the EU allocated 351.8 billion euros to finance Cohesion policy, since this Program was considered as basis of the EU investment policy, since its goal was to involve all EU regions in the initiative to create new jobs, providing economic growth, improving the competitiveness of business, maintaining of sustainable development of the state economy in general, with the ultimate goal of improving the welfare of the population. Based on these statements, the scientist comes to the ING Group conclusion that it is financial instruments that are catalysts of public and private resources that can contribute to the achievement of strategic investments necessary for the implementation of the EU Strategies “Europe 2020” and “Horizon Europe”.

According to Art. 94 of Special Regulations for Trading in Financial Instruments, Savings and Investment Insurance, “Non-Complex Financial Instruments” are considered to be shares, bonds, money market instruments and other debt securities, while “Complex Financial Instruments” include securities that give the right to purchase or sell other securities by means of monetary settlement (ING Group, 2018).

T. Kornel (2020) describes the transformation of accounting concepts and its effect on fair value accounting for derivative financial instruments in the information economy. Given the fact that the business environment is extremely volatile, it should be taken into account that accounting information must be effective in order to achieve a financial state of business entities that is most in line with market requirements.

O.V. Tretyakova *et al.* (2020) consider the main directions of modernization and development of the Ukrainian stock market: corporate reform, improving the efficiency of issuer regulation, expanding tools in the stock market; stimulating the inflow of investment stock market; ensuring reliable and efficient functioning of market infrastructure; ensuring the functioning of a unified state policy to stimulate the improvement of the investment climate.

O.V. Tymoshenko & L.O. Hudyma (2020) studied the national stock market and found that it is inferior to other developed countries in terms of the level of capitalization of stock exchanges, and therefore needs auxiliary measures for its improvement. Researchers consider the main problems that stand in the way of improving the functioning of the stock market: lack of developed infrastructure, insufficient involvement of the state in solving this issue, underdeveloped legislation in this area and an inadequate level of transparency. To improve the securities market in Ukraine, the authors suggest taking measures to: overcome structural disparities in the economy; ensuring a high level of openness and transparency of the stock market; improvement and harmonization of legislation regulating the stock market.

O.V. Yaroshevska (2020) came to conclusion that the exchange segment of the market is characterized by greater capitalization and monopolization, compared to the over-the-counter segment. The author also proved on the basis of statistical calculations that the level of development of derivatives in Ukraine still remains insufficient. O.V. Yaroshevska (2020) classified the factors that stand on the way of the development of the derivative financial instruments market and are the reasons for insufficient involvement of investors in this segment of the national economy. First of all, it is about: inefficient demand; insufficient level of business activity due to lack of appropriate infrastructure; the fragmentation of national legislation and the absence of uniform, clearly defined rules for the functioning and state regulation of the market, a low level of protection of debtors and creditors in case of force majeure or other reasons for non-fulfillment of futures, forward or swap contracts; unclear mechanism of funds turnover; lack

of effective specialized clearing institutions. The author has proven that the derivatives market is a fairly effective tool for the functioning of the stock market, and therefore is an extremely promising market segment for Ukraine. The derivative securities market is associated with its significant potential for hedging the risks of buyers and sellers of underlying assets, which in the future will contribute to the development of economic support for financial and commodity markets.

Finally, according to classification of financial instruments of Valuation of Financial Instruments there are eleven basic financial instrument classes in Bloomberg: government and corporate bonds; mortgages; money markets instruments; municipal bonds; preferred instruments; equities (stocks, equity futures, equity options); commodities; indices; currencies; derivatives and structured notes (Valuation of financial instruments: Theoretical overview with applications in Bloomberg, 2017).

Questions about financial instruments using for stimulating regional development were considered by Ukrainian scientists such as A.V. Nechyporenko (2017), S.V. Shevchuk & B.Yu. Kotyk (2017), S. Danylina (2016), Ya.V. Petrakov (2016). However, new challenges in the development of the financial markets necessitate further search for effective financial instruments to stimulate national development, considering the experience of European countries. Thus, Authors have used the method of analyzing literature and bank materials related to the financial instruments.

MATERIALS AND METHODS

The study was conducted on the basis of data of statistical and graphical analysis.

The methodology used for the research includes the selection of information for the generalization and analysis of foreign experience in the use of financial instruments on the example of EU countries, as well as methods of state regulation of financial instruments that can be applied in Ukraine.

This study uses annual time series data (the trading volume on the stock market, the over-the-counter market trading volume, the trading volume, on the securities market, the trading volume in government bonds of Ukraine on the securities market, the trading volume in derivatives on the securities market) covering the period from 2013 to 2021 obtained from the National Securities and Stock Market Commission (National Securities and Stock Market Commission, n.d.).

The volume of trade transactions is the dependent variable in the study and indicates that the volume of trading on the securities market steadily increased in the period 2013-2016 and decreased in the period 2016-2021 (National Securities and Stock Market Commission, n.d.).

A study of the financial market of Ukraine, the state of the global financial assets market (bank deposits, government and private bonds and shares), and indicators of the European financial system was conducted.

The impact of the spread of COVID-19 on global markets was determined in the research process.

It is established how financial instruments in Ukraine can be studied on the basis of studying similar systems of financial instruments in the European Union, taking into account the fact that the Law of Ukraine No. 3480-IV "On Capital Markets and Organized Commodity Markets" (2006) is already in use in Ukraine, which defines the procedure for the use of financial instruments.

Actions aimed at obtaining new scientific results of the study involved the use of indicators of securities and shares of the market of Ukraine obtained on the basis of annual reports of the National Securities and Stock Market Commission of Ukraine for the period from 2013 to 2021 (National Securities and Stock Market Commission, n.d.).

The criteria for forming the sample were the study of the Ukrainian stock index, trading volumes on the stock market, volumes of corporate bonds, government bonds, shares, investment certificates and futures.

Taking into account the constant innovations in existing financial instruments and various types of index currency options, it was found that the best example of a positive foreign experience of financial market integration is the experience of the countries of the European Union, since financial instruments for stimulating the development of regions are used in almost all EU countries.

Thus, the experience of Germany, the Czech Republic, Slovenia, Sweden, the Netherlands, and Belgium in financing the economic development of regions, providing financial incentives, modernization and reconstruction of the production of new goods, development of regions with centralized state funding, stimulation of creation, modern reconstruction, reengineering and expansion of existing enterprises.

Derivatives are one of the most important modern instruments on the international financial market, and are the most dynamic segment of the securities market, and therefore this work is focused on the study of the derivatives market of Ukraine, where there are two types of these financial instruments, namely: option certificates and futures contracts.

It was revealed that although the derivatives market in Ukraine began to operate in 1995, in 2012 there was a sharp decrease in the volume of derivatives trading on the securities market, while in 2014 the maximum volume of trading was observed, and in 2020-2021 the volume of derivatives trading decreased, due to unstable socio-economic situation in Ukraine.

Since derivatives still hold a relatively small share of the total volume on the securities market along with other financial and economic instruments, the improvement of the derivatives market will positively affect the development of the domestic market, the financial system of Ukraine and the national economy as a whole.

RESULTS AND DISCUSSION

The modern development of world financial markets indicates their growing efficiency and increasing role of

international capital markets in attracting credit resources. Globalization processes of the last two decades contributed to the growing importance of the world capital market.

Global financial assets or assets of the banking industry (bank deposits, government and private bonds and shares) in 2018 amounted to 124 trillion dollars (European Central Bank Statistical Data Warehouse, n.d.). There are four main regions in the world financial market: the European Union (Eurozone countries), the United States, Great Britain and Japan, which account for more than 80% of the world's financial assets (European Central Bank Statistical Data Warehouse, n.d.). The value of assets of global financial institutions generally increased from 2002 to 2019, despite minor fluctuations. In 2019, the assets of financial institutions worldwide amounted to 404.1 trillion US dollars (Norrestad, 2021).

During the spread of COVID-19 around the world, prices of risky assets and commodities began to decline at an unprecedented rate, while gold and US Treasuries rose, according to the Global Financial Stability Report. As central banks responded with aggressive monetary easing, sovereign rates in several advanced economies fell to near zero, and government bond yields are now expected to remain low for even longer. Global emerging markets (excluding China) have also experienced changes in financial conditions, mainly due to a sharp increase in their external financing costs (International Monetary Fund, 2020).

A correct understanding of financial instruments in Ukraine can be made on the basis of studying the similar systems of financial instruments in the European Union. Despite the fact that the majority of bank deposits are preserved on the European financial market, there is also a rapid growth of corporate and state debt. In the conditions of instability of the main market parameters, the primary task is hedging risks and diversification of funding sources. Issuing bonds is one of the ways of alternative financing of companies, which is considered a non-inflationary method of financing the state budget deficit.

Since financial instruments have been of particular interest to the industry in recent years, first of all it should be noted that according to the Law of Ukraine No. 34-80-IV "On Capital Markets and Organized Commodity Markets" (2006), financial instruments can be defined as securities, term contracts (futures), term exchange contracts (on a certain date in the future) in the case of price dependence on an interest rate, exchange rate or stock index (interest rate, exchange rate or index), swaps, options giving the right to buy or sell any of these financial instruments, including those, which provide for the monetary form of settlements (exchange rate and interest options).

The following results for 2019-2021 should be noted (hryvnia to US dollar exchange rate is given as of 11/07/2022). In Ukraine, stock exchange trading in securities increased by 16.9% in 2019. So, in 2019, the total volume of trades was UAH 3,840,289,543.51 (USD 94,763,468.07) (National Securities and Stock Market Commission, n.d.).

In 2020, this indicator was UAH 2,414,629,934.76 (USD 59,583,712.15). In terms of the trading structure in 2020, the volume of corporate bonds was 2.04% of the total turnover or UAH 49.3 million (USD 1.2 million), government bonds – 88.70%, or UAH 2141.9 million (USD 52.8 million), shares – 8.25%, or 199.3 UAH million (USD 4.9 million), investment certificates – 0.28% or UAH 0.28 million (USD 0.0069 million), and by futures 0.72% or UAH 17.3 million (USD 0.41 million) (National Securities and Stock Market Commission, n.d.).

In 2020, the Ukrainian stock index (UX Index) increased by 6.48% from 1518.72 to 1617.08 points. The maximum value of this financial indicator during the trading session during 2020 was reached on December 30 at 1651.85 points (an increase of 8.77% since the beginning of the year), and the minimum value was 1234.93 points (a decrease of 18.69% since the beginning year). Trading

volumes on the stock market of Ukraine in 2020 amounted to UAH 600 billion (USD 14.8 billion) (National Securities and Stock Market Commission, n.d.).

In the trading structure for January 2021, corporate bonds accounted for 10.71% of the total volume of turnover or 20,887,568.68.62, 78.22% of government bonds or 152,5148,818.55.55, 10.17% of shares or 19,823,671.93, for investment certificates for 0.43% or 843,630,630,630.03, and for futures 0.47% or 914,500 UAH (USD 22.57 billion) (National Securities and Stock Market Commission, n.d.).

In January, the Ukrainian stock index (UX Index) increased by 2.99% from 1617.08 to 1665.46 points. On 05/28/2021, the UX index reached a maximum of 1965.7 points, which indicated the positive state of the stock market of Ukraine, after 07/01/2021, a decrease in this financial indicator was observed (on 07/27/2022, the UX index was 1718.5 points) (Fig. 1, Fig. 2) (National Securities and Stock Market Commission, n.d.).

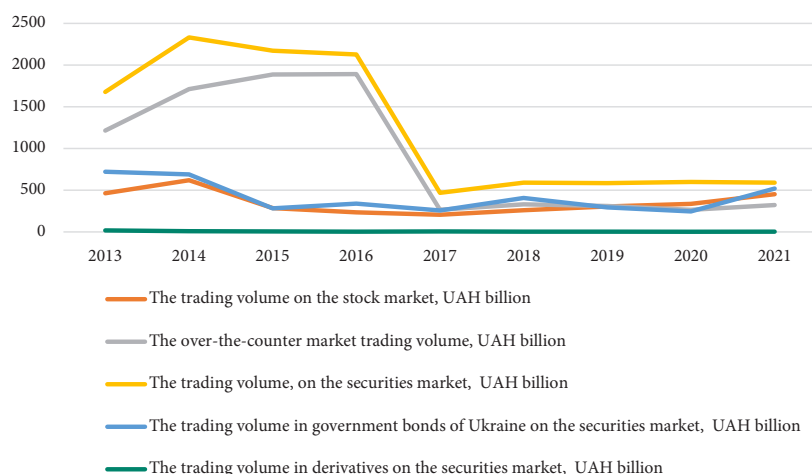


Figure 1. Volume of trades on the securities market in 2013-2021, UAH billion

Source: developed by the authors based on National Securities and Stock Market Commission (n.d.)



Figure 2. Volume of trades on the securities market in 2013-2021, USD billion

Source: developed by the authors based on National Securities and Stock Market Commission (n.d.), Hryvnia to US dollar exchange rate is given as of 11/07/2022

The volume of trading on the securities markets steadily increased in the period 2013-2016 and decreased in the period 2016-2021 (Fig. 1, Fig. 2), as the stock market of Ukraine is primarily negatively affected by the lack of competitiveness, tax regulation and development of the state's stock market infrastructure, as well as the imperfection legislation of Ukraine in this area. Therefore, foreign experience in this field is extremely important for the Ukrainian economy.

In global financial markets, there is constant innovation in existing financial instruments, such as convertibles and dual-currency bonds.

There are different types of index currency options: heaven and hell bond (Japan) – the principal amount of such a bond is tied to one currency, but denominated in another; inflation-indexed bonds (Great Britain) – the principal debt of such bonds is indexed depending on the level of inflation; equity Linked term notes (USA) – security provides fixed income; and bear bonds – types of bonds whose payments depend on the value of individual shares.

The best example of a positive foreign experience of financial market integration is integration within the European Union, which is characterized by an increased role of commercial banks, a high degree of transparency of capital markets and a variety of regulatory structures.

It should be noted that financial instruments for stimulating the development of regions are used in almost all EU member states.

The analysis of the German experience of financing the economic development of regions should begin with the consideration of the regional development strategy. The purpose of the main tool for the implementation of the regional development strategy "Improving the Regional Economic Structure" is to create conditions in weak regions for their self-development by accelerating investment activities and creating highly competitive enterprises.

The Czech experience is also important for Ukraine. Financial support instruments for the regions of the Czech Republic include subsidies, low-interest loans, and loans for the development of priority areas. Attracting investments to the industries and regions of the Czech Republic involves the systematic use of certain tools, namely: subsidies for the creation of new jobs, tax breaks, as well as the transfer of land for rent for a small fee.

Similar to the Czech Republic, Slovenia also provides financial incentives, among which the most important can be highlighted, namely: investment transfers to municipalities; subsidies to companies for initial investment and provision of expanded employment opportunities; loans to municipalities for co-financing projects to update and increase the efficiency of economic and market infrastructure; loans and guarantees for agricultural enterprises; investing in selected projects that are of key importance for the state's economy; transfer of state capital to expand joint investment in regional and local self-government development projects.

As for Sweden, in this country it is regional firms that focus on modernization and reconstruction of the production of new goods, as well as support small and medium-sized enterprises, which receive primary financial incentives.

It is also appropriate to consider the experience of the Netherlands in this area, where there are five regional development organizations with centralized state funding. The main goal of these companies is to modernize the economic structure of regional development and focus on unemployment problems. These organizations promote and stimulate the development of regional financial opportunities and connections between local and national industry, as well as provide assistance to small and medium-sized businesses.

And finally, overview of the activities of regional investment companies in Belgium can be considered. In this country, such companies, first of all, use incentives for the creation, modern reconstruction, reengineering and expansion of already operating enterprises, or contribute to the creation of new state-owned firms. There are also companies in the country that specialize in regional development, namely: managing regional data banks, supporting the interests of key regional industries, and participating in the anti-crisis management of certain firms that take the most important places in creating the national GDP (Nechyporenko, 2017).

Therefore, financial instruments are extremely important components of the modern financial and economic world. So, first of all, it should be noted that a popular financial instrument in the world with an average daily trade volume of more than 9 trillion dollars is a derivative. Nevertheless, the derivatives market is a relatively young segment of the financial market of Ukraine.

There are two types of derivatives on the Ukrainian stock market today, namely: option certificates and futures contracts. Futures contracts without a currency offer are the most common type of financial instrument. Other instruments include: stock indices, interest rates of the underlying asset (commodity); call options on the underlying asset.

It is important to emphasize that derivatives are one of the most important modern tools in the international financial market, and the derivatives market itself is the most dynamic segment of the securities market (Shevchuk & Kotyk, 2017).

It should be noted, that according to the Law of Ukraine "On Capital Markets and Organized Commodity Markets", derivatives are those securities whose issue and volume limits are related to the right to buy or sell securities, other financial and/or commodity resources within the term established by law (Law of Ukraine No. 3480-IV, 2006).

However, in Ukraine, the derivatives market began to operate in 1995. During this period, there is a number of problems regarding the operation of this financial instrument, namely: insufficient information and training of economic agents regarding the use of derivatives as well as absence of appropriate legislation on the regulation of the sphere of operation of derivative financial instruments.

In the context of recent years, it should be noted that in 2012 there was a sharp decrease in the volume of derivatives trading on the securities market, while in 2014 the maximum volume of trading was observed (UAH 9.6 billion or USD 221.1 million), and in 2020-2021 the volume of trading in derivatives decreased to UAH 2.02 billion or USD 49.1 million (Fig. 1, Fig. 2). The main reason for such significant decline was the unstable socio-economic situation in Ukraine (National Securities and Stock Market Commission, n.d.).

Hence, having outlined the main problems of the use of derivatives and having studied the experience of some developed countries of the world of these securities market, it is appropriate to note that derivatives still occupy a relatively small share of the total volume on the securities market, along with other financial and economic tools. In this context, it is expedient to: improve and expand the legal framework regarding operations with derivative securities; create an educational infrastructure for studying the specifics of the use of derivatives, and, at the same time, pay special attention to the role of hedging in the process of reducing financial risks; apply international experience and, in particular, the experience of the European Union countries in managing and regulating operations with derivatives; provide consultations to real and potential buyers of derivatives (Danylina, 2016).

It is also worth noting that the improvement of the derivatives market has a positive effect on the development of the domestic market, the financial system of Ukraine and the national economy as a whole. In Ukraine, there is no single law that would regulate the system of derivative financial instruments. The regulation, issue and circulation of derivatives is based on the requirements of the Tax Code of Ukraine, the Civil Code of Ukraine, the Laws of Ukraine "On Capital Markets and Organized Commodity Markets" and "On State Regulation of the Securities Market in Ukraine". A draft of the Law of Ukraine "On Derivative Financial Instruments" has also been developed, which defines the main types of instruments, derivatives market participants, its regulation and supervision by state authorities. Its adoption will ensure the further development of the derivatives market, the influx of investments into the state's economy, the emergence of high-yield hedge funds, trade transparency, and the dynamic development of the entire economy (Petrakov, 2016).

Also, on August 16, 2020, the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Simplifying Investment Attraction and Introducing New Financial Instruments" became effective. This document introduces a wide range of reforms in the capital market, including a derivatives reform, a corporate bond reform and the implementation of the EU Directive /2014/65 of May 15 on markets in financial instruments (MiFID II) (Law of Ukraine No. 738-IX, 2020).

In Ukraine, the issue of attracting financial assets to the state's economy, particularly in the financial sphere, remains

debatable. Therefore, the study of the experience of developed countries in attracting and using external financial resources is important for the creation of highly competitive enterprises. Summarizing the foreign experience of attracting and using financial assets in different countries allows to determine the key processes of movement of financial instruments. In the context of intensifying investment activity, Ukraine needs to: develop and implement a long-term state program to increase the level of the country's investment attractiveness, within which it is necessary to provide support and encouragement through the introduction of benefits and guarantees at the national and regional levels; introduce strict control over possible shadow flows that are taken out of the country and those that come from offshore territories, and minimize corruption schemes that prevent the adequate functioning of the country's financial sphere; hold consultations with foreign investors on the issue of improving the legal framework for investment activities and business conditions in Ukraine. Implementation of the above proposals should help increase the attractiveness of the state's economy for investment and attract significant FDI for the formation of effective and reliable economic resources.

CONCLUSIONS

Summarizing the study of the development and some achievements in the derivative securities market of Ukraine, it is worth noting that for effective further development, the market of Ukrainian financial instruments needs constant state support. Taking this into account, the priority areas of state activity in this area should be: state financial support for the activities of non-governmental financial organizations, promotion of expanded access to global financial market instruments; constant active participation in the process of joint coordination of financial-economic and tax-regulatory policy, as well as the definition and establishment of uniform standards of state regulation, management and influence on the securities market with the aim of implementing European and world standards in this area, the protection of national interests as the ultimate goal of which should have been the transition to EU standards in this field, as one of the conditions for acquiring full membership into this economic and political union.

Consequently, special attention should be paid to those types of aid that relate to improving the business environment and stimulating investment activity. It is necessary to continue strengthening the trends of providing various types of financial support for regional development. In the future, it should also be taken into account that institutional support is an indispensable condition for sustainable and effective regional development, primarily, it is about regional development funds, which involves increasing the budgetary self-sufficiency of regions.

Thus, through participation in the negotiations on carbon regulation, Ukraine actively cooperates with the EU innovation project "European Green Deal", the main goal

of which is the introduction of innovations that do not harm the environment.

Although the legislation of Ukraine shows prospects for further development and improvement in the financial sector, first of all, taking into account the experience of the leading countries of the European Union, as well as due to the adoption of a number of laws and consideration of bills (proposed legislation), it is necessary to take into account the fact that derivatives are one of the most important modern tools in the international financial market, which is why it should be noted that derivatives in Ukraine still occupy a relatively small share of the total volume on the securities market.

Therefore, it is possible to formulate advices for Ukraine taking into account the European experience, namely: self-development by accelerating investment activities and creating highly competitive enterprises; the use

of financial support tools for regions, including subsidies, low-interest loans and loans for the development of priority areas; provision of financial incentives, investment transfers to municipalities for co-financing projects to renew and improve the efficiency of economic and market infrastructure; allocation of loans and guarantees for agricultural enterprises; financial support for the modernization and reconstruction of the production of new goods; using incentives for reengineering and expansion of existing enterprises or promoting the creation of new state-owned firms.

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CONFLICT OF INTERESTS

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Застосування фінансових інструментів: Європейський досвід та уроки для України

Анотація. Дана тематика є актуальною для сучасно дослідження фінансового становища загалом, і ринку похідних цінних паперів зокрема. У цьому контексті також важливо окреслити ступінь державної підтримки розвитку ринку похідних цінних паперів, попередньо визначивши пріоритетні напрями державної діяльності у цій сфері. Сучасний розвиток світових фінансових ринків вказує на їх зростаючу ефективність та збільшення ролі міжнародних ринків капіталу у залученні кредитних ресурсів. Метою статті є дослідження, оцінка та аналіз фінансових інструментів, їх вплив на стан національної економіки, а також проблем у впровадженні новітніх фінансових інструментів. У статті узагальнено і проаналізовано іноземний досвід застосування фінансових інструментів на прикладі країн ЄС. Продемонстровано найефективніші методи державного регулювання фінансових інструментів, які можна застосувати в Україні. Досліджено динаміку зміни фінансових інструментів, які застосовуються на українському фінансовому ринку. Обґрунтовано важливість використання фінансових інструментів в економіці України. У статті визначено найважливіші проблеми та запропоновано методи та шляхи ефективнішого функціонування досліджуваного ринку. Доведено, що для підвищення конкурентоспроможності країни на світовому фінансовому ринку необхідно розробляти новітні фінансові інструменти. Систематизовано дані щодо використання фінансових інструментів поряд із їх групуванням за 2013-2021 рр. Необхідно і надалі посилювати тенденції надання різних видів фінансової підтримки регіонального розвитку. У подальшому слід також враховувати, що неодмінною умовою стійкого та ефективного регіонального розвитку є і інституційне забезпечення, насамперед, йдеться про фонди регіонального розвитку, що передбачає підвищення бюджетної самозабезпеченості регіонів. Отож, саме злагоджена діяльність фінансової системи у гармонійному і професійному поєднанні її функцій можлива за сприяння державного апарату і розвиненого фінансового ринку

Ключові слова: ринок похідних цінних паперів; похідний цінний папір (дериватив); своп; опціонний сертифікат; ф'ючерсний контракт; країни ЄС; державне регулювання