

The Development Of The Derivatives Market In Ukraine As A Necessary Condition For Hedging Risks

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ABSTRACT : The article reveals modern trends and contradictions in the development of the derivatives market in Ukraine and, accordingly, opportunities for hedging the risks of Ukrainian enterprises. It has been established that inflationary pressure, exchange rate fluctuations and the difficult economic situation in the country, which are largely the result of a full-scale military invasion, have complicated doing business in Ukraine and increased the need to find effective ways and tools for risk management. The functionality of the derivatives market is comprehensively outlined. It was noted that the derivatives market in Ukraine has been shrinking in recent years, and its share in the securities market in Ukraine is insignificant. The reasons for the low level of development of the derivatives market in Ukraine are outlined, including the unstable political situation in the country, the outflow of investment capital, the speculative market situation, the imperfection of regulatory and legal support, the lack of the necessary exchange infrastructure, and the distrust of market participants. It was emphasized that the derivatives market in Ukraine has significant potential for further development in the conditions of the transformation of the financial sector in accordance with the requirements of the European Union.

KEYWORDS - derivatives, derivatives market, hedging risks, exchange market, options, over-the-counter market.

I. INTRODUCTION

In the conditions of an unstable economic situation, Ukrainian enterprises are influenced by new market risks and need additional financing. Macroeconomic instability, high volatility of commodity prices, exchange and interest rates affects the financial stability of business entities and makes it necessary to use progressive financial instruments to minimize company risks. Derivatives are an effective tool for protection against possible financial losses and predicting business cash flows in the long term.

Selected problematic's relevance is determined by the fact that the features of the Ukrainian economy have not contributed to creation of appropriate conditions for the establishment and development of a transparent and liquid derivatives market, which is evidence of the maturity of the country's economic system and ensures the inflow and transfer of free investment capital.

The development of the derivatives market depends on many factors. The Ukrainian economy hadn't resumed growth after the crisis of 2008-2009, and the stability of the hryvnia exchange rate was artificial until 2014. In addition, territorial conflicts due to the Russian annexation of Crimea and military operations in eastern Ukraine reduced the investment potential. The next blow to the financial markets was the outbreak of the pandemic COVID-19, which caused a significant disruption on a global scale, especially in Europe. The rapid spread of this pandemic affected not only developed countries, but also Ukraine. Since February 2022, the derivatives market in Ukraine has been operating in wartime.

Although many studies have been conducted on modern trends in the development of the derivatives market in Ukraine, there are no recent specific studies that would analyze the development of the derivatives market and the possibility of using its tools for hedging risks. This determines the purpose of the study that consists in identifying modern trends and contradiction in the development of the derivatives market in Ukraine and, accordingly, opportunities for hedging the risks of Ukrainian enterprises.

The rest of the paper is organized as follows: Section 2 is the literature review. In section 3, the research data and methodology is described. Section 4 is the research results and discussion, and the final section is the conclusion.

I. LITERATURE REVIEW

A review of the latest research on this topic showed a high level of interest in the derivatives market in Ukraine. In domestic scientific opinion, some attention is paid to the development and improvement of various tools in the derivatives market for price risk management: for example, in the article S. Shevchuk and B. Kotyk (2017) the reasons for which economic agents resort to operations with derivatives are considered. In addition to hedging to avoid possible financial losses, it is stated that derivatives can be used as instruments of speculation and for carrying out arbitrage operations.

In the work of V.O. Yavorska (2017) is justified that the definition of the concept and economic term “derivative” should become more transparent and understandable for financial market participants. In this context, it is necessary to fill the Ukrainian information space with methodical and practical materials that will provide an opportunity to study the features of all types of derivatives for managing price risks in various economic situations.

E.Callens (2022) argues that derivatives definitions in EU law do not identify any distinctive conceptual properties of derivatives and, instead, only provide a circular description of what derivatives may be.

M.Milos and L.Milos (2022) found empirical evidence that using derivatives by the European financial sector (credit institutions and bank holdings) negatively impacted the market valuation from 2008–2021.

The monograph of M.Solodky (2015) is devoted to the justification of the basic principles of exchange trading in commodity derivatives in the context of the globalization of commodity and financial markets

In the work of O. Yaroshevska (2020), attention is paid to the systematization of factors that restrained the market of derivative financial instruments and the mass exit of investors to it.

V.Akulenko, O.Zakharin and M.Dunaiev (2021) researched the current trends in the development of the derivatives market in Ukraine and the world, and explain the low level of development of the derivatives market in Ukraine due to the lack of the necessary exchange infrastructure, the imperfection of legislative norms, the weak information provision of market participants and the lack of mechanisms for interaction with state bodies.

N.Rasool, S.Bashir and M.Hussain (2022) revealed a strong relationship between financial literacy and investor’s participation in derivatives market.

Highly appreciating the scientific output of the mentioned authors, we should recognize the insufficient coverage of the specifics of the functioning of the derivatives market in Ukraine and the identification of its modern trends and contradictions in development, including those caused by the latest events, as well as the opportunities provided by this market in terms of hedging risks.

II. METHODOLOGIES AND DATA

To write the article, the following methods of empirical research were used, such as observation and comparison in the analysis of the volumes of trade in derivative contracts and general scientific research methods: structural and dynamic analysis; analysis and synthesis - to determine the main trends in the development of the derivatives market; generalization – to describe the functions performed by the derivatives market; induction and deduction - when outlining the reasons for the low level of development of mentioned financial market; system-structural method - in the study of transactions on the derivatives market in Ukraine.

To make the research more reliable, all statistics used in this article are based on official reports of National securities and stock market commission and National Bank of Ukraine[9-17].

III. RESULTS & DISCUSSION

Inflationary pressure, exchange rate fluctuations and the difficult economic situation in the country, which is the result of a full-scale military invasion, have made it difficult to do business in Ukraine. Business entities use different methods of price risk management: some try to avoid it, expecting favorable prices for goods or raw materials; some tries to prevent price risks by consulting for the analysis of world markets. Such methods are a way to anticipate and predict market dynamics, but not to insure yourself against possible losses. In view of this, it is worth considering derivatives when managing price risk.

For Ukrainian companies, the derivatives market is still significantly limited, despite the fact that derivatives are an effective tool for hedging risks related to prices, because when concluding such a contract, the market participant clearly fixes the price.

According to p.14.1.45 p. 14.1 a.14 Tax Code of Ukraine [18], “ derivative is a document certifying the right and/or obligation to purchase or sell in the future securities, tangible or intangible assets, as well as funds under the conditions determined by it”.

The role of the derivatives market cannot be overestimated due to the multifunctional purpose of derivative financial instruments. Based on the generalization of scientific sources [3,6,19]. Table 1 shows the functions performed by the derivatives market. In addition to minimizing price risks, the derivatives market provides an opportunity to determine the future spot price of an asset, invest free cash, conduct speculative

trading for profit, gain open access to market information, and redistribute risks between investors and speculators.

Table 1. Functional purpose of the derivatives market

Function	Description
Pricing	Influence on the formation of global pricing
Forecasting	Price forecasting in the market of real assets
Hedging	Financial risk management
Diversifying	Redistribution of risks between market participants
Speculative	The possibility of receiving profits from speculative strategies
Regulatory	Regulating relations between market participants, ensuring equal conditions for participation
Informational	The extension of economic information, free access to stock market quotations
Innovative	Engineering of new types of derivatives, implementation of new technologies, consolidation of exchange platforms
Balancing	Equilibrium of supply and demand in time and space
Investing	Attraction of the monetary capital
Integrating	Integration into the world economic space

Source: Authors research

The derivatives market in Ukraine, taking into account the dynamics of recent periods according to many indicators that characterize it, is still at the stage of formation. In Ukraine, the derivatives market is a fairly young segment of the securities market, since transactions with them were started in 1995 [7]. The current economic crisis, caused by a full-scale war in the country, has a particular impact on trading in derivative financial instruments.

The derivatives market in Ukraine is quite unstable and has been shrinking in recent years: in 2013, the volume of derivatives trading amounted to UAH 18 billion, and in 2021 - UAH 0.59 billion. Derivatives occupy a small share of the volume on the securities market, which is shown in fig. 1.

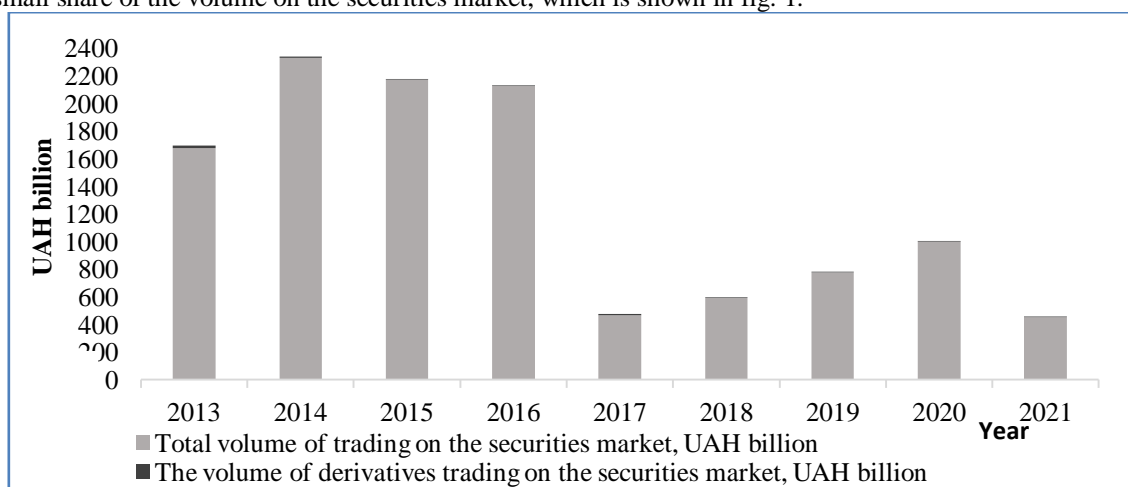


Figure 1. Volume of derivatives trading on the securities market in Ukraine in 2013-2021, UAH billion
Source: Authors research

According to the reports of the the National Securities and Stock Market Commission (NSSMC) in 2021, the volume of derivatives trading amounted to UAH 59.31 million, and in the overall structure of trading volumes on the securities market, the share of the volume of derivatives trading was 0.01% of the total volume of trading on the stock market.

Macroeconomic unbalances accumulated in previous years, the political crisis at the beginning of 2014, the occupation of Crimea and certain areas of Donetsk and Luhansk regions provoked the economic crisis, which resulted, in particular, a massive outflow of investment capital. Thus, it can be clearly observed that the derivatives market instantly reacts to economic, political or social events that have occurred or are expected.

In general, derivatives are traded on the exchange and over-the-counter markets. At the same time, a larger share of trading takes place on the exchange market, because its advantages are high liquidity, trading takes place openly in stock exchange halls, prices are transparent and accessible, participants are unfamiliar with

each other, contracts are standardized and available. The volume of derivatives trading on the exchange and over-the-counter market is shown in fig. 2. Thus, for the entire period of the study, the volume of trades on the exchange market in Ukraine is much larger than on the over-the-counter market.

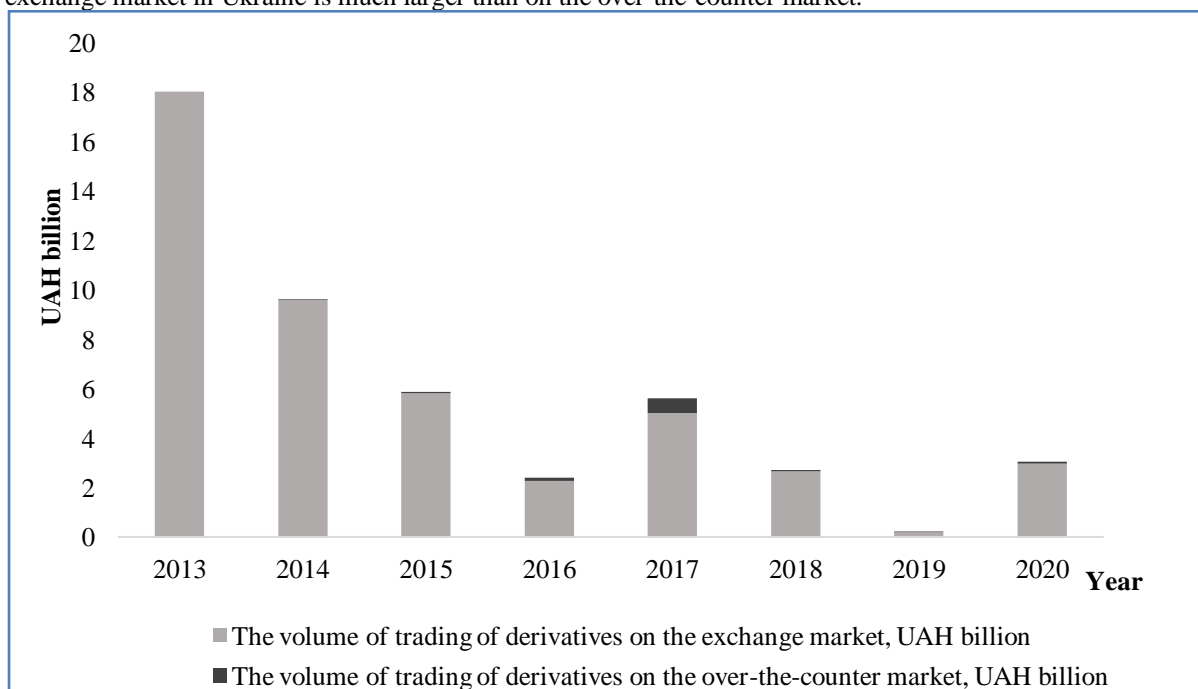


Figure 2. The volume of derivatives trading on the exchange and over-the-counter markets in Ukraine in 2013-2020, UAH billion

Source: Authors research

The derivatives market in Ukraine is represented by futures contracts, options, option certificates and government derivatives [11]. It can be noted that on the derivatives market in Ukraine, there is a significant demand for options, due to the fact that the market situation is speculative, and such agreements as options offer the most favorable conditions for the realization of speculative intentions. As shown in Table 2, despite the fact that options are in demand on the derivatives market in Ukraine, the volumes of their issue are insignificant and unstable. The largest issue volume of UAH 198.9 million occurred in 2016, while in 2019, the National Securities and Stock Market Commission (NSSMC) did not record any option agreements.

It is important to note that for comparison and analysis, it would be advisable to spread the volume of trade in other financial instruments, such as futures contracts or government derivatives in Ukraine. However, in the annual report, the National Securities and Stock Market Commission (NSSMC) does not disclose such statistical data, which can be considered a deficiency on the part of the regulator regarding free access to economic information.

Table 2. Volumes of issuance and operations on the derivatives market of Ukraine in 2013-2021, UAH million

Indicator	Years									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	
The volume of registered issues of option certificates, UAH million	0	1,28	0,22	198,9	32,5	35,0	0	59,8	22,2	
Trading volume of, UAH billion										
- securities	1676,97	2331,94	2172,67	2127,55	468,69	590,58	778,1	1000,99	451,96	
- derivatives	18,01	9,6	5,87	2,40	5,62	2,71	0,2	3,05	0,59	
Specific weight of derivatives in the total volume of trading securities, %	1,07	0,41	0,27	0,11	1,20	0,46	0,03	0,3	0,01	

Source: Authors research

In addition to the outflow of investments as a result of the temporary occupation of Crimea, Luhansk and Donetsk regions since 2014, the low level of development of the derivatives market in Ukraine can also be explained by the following factors:

- economic crisis caused by COVID-19;
- lack of the necessary trade and post-trade infrastructure in the form of a sufficient number of exchanges;
- high speculative component of the derivatives market directly in Ukraine;
- weak level of information provision of market participants regarding the cost of concluding derivative agreements;
- no necessary presentation of statistical data to increase interest among market participants;
- insufficient interest of banks with foreign capital as market makers to stimulate market development by hedging their own positions through parent structures and foreign investment companies;
- imperfection of legislative norms, although positive developments are being made in this regard.

Positive trends in the improvement of the situation on the derivatives market in Ukraine include the entry into force of the Law of Ukraine “On Amendments to Certain Legislative Acts of Ukraine Regarding Simplification of Investment Attraction and Introduction of New Financial Instruments”, which regulates the definition of derivative contracts, their turnover, exchange requirements, tax accounting rules, etc. The new legislation allows professional market participants to use the financial infrastructure to reduce the risks of their clients.

It is also worth adding that the state regulators of the financial sector presented the Strategy for the Development of the Financial Sector of Ukraine until 2025, and the National Bank of Ukraine, starting from 2020, publishes annual reports of its implementation [9]. One of the strategic priorities is the development of the derivatives market, which correlates with the measures defined in the Action Plan for the Implementation of the Association Agreement between Ukraine and the European Union as well as the National Economic Strategy for the period until 2030. The main achievements in the reform and development of the derivatives market include:

- the beginning of the operation of commodity exchanges that have received licenses in accordance with the new legislation of Ukraine;
- approved Standards of corporate governance in professional participants of capital markets and organized commodity markets;
- the Law of Ukraine “On Financial Services and Financial Companies” was adopted.

As of November 2022, the implementation of the Strategy for the creation of a legal framework for the functioning of the derivatives market is being carried out with a slight deviation due to the effect of martial law.

IV. CONCLUSION

It is well known, that derivatives are actively used around the world in all industries as an effective risk hedging tool. They play a critical role in reducing the uncertainty that can arise from fluctuations in prices, credit rates, currency fluctuations, interest rates, etc. However, based on the results, the author found that the derivatives market for Ukrainian companies is still significantly limited. Inflationary pressure, exchange rate fluctuations and the difficult economic situation in the country, which are largely the result of a full-scale military invasion, have made it difficult to do business in Ukraine and caused the outflow of investment capital and the reduction of trading volumes on the national derivatives market.

Based on the structural and dynamic analysis, it was found that the volumes of derivatives trade in Ukraine are insufficient, but have significant potential for development. In recent years, there has been a decrease in the volume of transactions with derivatives on the over-the-counter market due to the strengthening of measures to regulate this segment of the market.

At the same time, the lack of relevant scientific research, non-compliance of the regulatory framework with EU requirements and insufficient interest on the part of investors leads to the fact that in Ukraine this market is almost non-functional, and the volume of derivatives trading on the stock market is less than 1%. Sustainable economic growth is necessary for the successful functioning of the derivatives market; encouraging business entities to use derivatives; implementation of European legislation in the field of organization of trade in financial instruments; formation of a system of effectively working clearing and settlement institutions.

The development of the Ukrainian derivatives market is necessary to increase financial activity in the country and increase investment attractiveness. Recent legislative changes within the framework of the implementation of the Association Agreement between Ukraine and the EU, under other favorable conditions, allow to expect an increase in the volume of derivatives trade on the national market.

Besides the contributions, this study has some limitations, such as the statistical support for conducting this study is quite limited, so the author can only conduct this study based on the available data that has been officially published. The study was unable to survey market participants to obtain more data for more accurate analysis. These limitations are also a suggestion for future research.

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