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PROBLEMS AND PROSPECTS OF FINANCIAL DERIVATIVES MARKET DEVELOPMENT

The article studies the problems and prospects of the financial derivatives market development. Globalizing the economic space contributes to transforming the stock market into the principal source of capital allocation. Still, the current conditions of the derivatives market in Ukraine do not correspond to the needs of the national economy, which requires strengthening the regulation of their activities to ensure the hedging of risks of market participants. The article analyses the dynamics of derivatives trading in the global exchange market, assesses the dynamics of world exchange trading in financial derivatives, and analyses the turnover of OTC derivatives in the EU. It also studies the dynamic changes in the amounts paid under the terms of contracts for derivative securities in the world by maturity, region and industry sector; the dynamics of options and futures trading in the global exchange market. In this analysis, we examine the trading volumes of derivatives within the financial market of Ukraine. We estimate the volume of trading within both exchange and over-the-counter markets, and present the dynamics of exchange contracts as well as the share of financial instrument trading in the securities market. The factors hindering the development of the derivatives market in Ukraine are identified. These factors include legislative shortcomings, the current level of derivatives market infrastructure, and the current state of development of the underlying asset markets. The article also analyses the derivatives market and provides prospects for its development. To ensure the future development of the financial derivatives market in Ukraine, it is essential to take certain measures. These include comprehensive regulation of the derivatives market, ensuring the operation of regulated markets and building their infrastructure, and introducing appropriate instruments to protect participants and hedge risks.

Keywords: derivative financial instruments, options, futures, financial derivatives market, global stock market, global financial market, risk hedging.

Problem statement. Over the past ten years, the turnover of derivatives trading on global exchanges has increased almost 80 times. The globalisation of the economic space is helping to transform the stock market into the main source of capital allocation, which generally facilitates the accumulation of main investments and the transfer of commodity and financial flows on a global scale, signalling the market's future prospects. At the same time, one of the main problems in the derivatives market is the lack of regulation, as a global regulatory system is needed to more accurately assess the consequences of investing in various derivatives and to assess the risks associated with the growth of speculative transactions with these instruments; along with strengthening the regulation of national derivatives markets.

Analysis of recent research and publications. Problematic issues of the financial derivatives market have been studied by a large number of foreign and Ukrainian researchers: L. Robert, R. Glen Gabbard, I. Hisan, K.S. Kalynets, M.V. Kozoriz, R.M. Bezus, S.V. Zakharin, V.P. Khodakivska, O.D. Danilov, etc. Many scientific works of foreign scholars reflect the sign of derivativity. A.B. Feldman defined derivatives as "derivatives" through the value and price of underlying commodities, which allows the right materialised in these instruments to be exercised in the future.

The purpose of the article. The article aims to establish a theoretical and methodological base for effective enterprise management. It proposes the formation of an efficient economic mechanism to ensure the competitiveness and profitability of the enterprise.

Due to the legislative changes adopted, the concept and economic purpose of the terms «derivative» and "derivatives market" have become more transparent and understandable for exchange trading participants. In this context, there is a need to fill the Ukrainian information space with methodological and practical materials that will help to study the features of all types of derivatives, as well as to find out the advantages and disadvantages of their use in different price situations, both in the real asset market and in the exchange market.

Analysing the state and dynamics of the derivatives market, it can be stated that it does not meet the needs of the national economy and does not fulfil its primary function of hedging the risks of market participants. Improving the performance of the derivatives market in Ukraine will help to create a solid foundation for the long-term growth of Ukraine's economy and ensure the stability of its financial system.

Summary of the main research material. Most explanatory dictionaries define the term "derivative" as: "a derivative instrument, the value of which is derived from the actual offered price of any underlying asset (commodity, securities, currency)" [1].

Studying the domestic views on the interpretation of the term «derivative», we focus on the existing legislative provisions in this context. The definition of a derivative is found in Ukraine's Tax Law [2], which states that «a derivative is a standard document certifying the right and/or obligation to purchase or sell securities, tangible or intangible assets, as well as funds on the terms specified by it in the future. The standard (typical) form of derivatives and the procedure for their issuance and circulation are established by law».

A similar definition is provided in other legal acts, such as the Resolution of the Cabinet of Ministers of Ukraine "On Approval of the Regulation on Requirements to the Standard (Model) Form of Derivatives", the Rules for Issuance and Circulation of Stock Derivatives, and the Law of Ukraine "On State Support of Agriculture of Ukraine". The similarity in the treatment of derivatives in all the above legislative acts can be explained by their reference to the primary source – the Law of Ukraine "On Corporate Profit Tax", which was repealed by the Tax Code in 2010.

The new Law of Ukraine titled "On Amendments to Certain Legislative Acts of Ukraine on Simplification of Investment Attraction and Introduction of New Financial Instruments" introduced the concept of derivative securities. These are securities that certify the holder's right to demand from the issuer the purchase or sale of the underlying asset. The holder also has the right to exercise the rights to the underlying asset established by the prospectus (decision on the issue of securities) and/or make payments depending on the value of the underlying indicator in the cases and the manner specified in the prospectus (decision on the issue of securities). The derivative securities include:

a) option certificates;
b) stock warrants;
c) loan notes;
d) depositary receipts;
e) government derivatives.

The derivative financial instruments market is defined by the law as a group of individuals and entities who participate in the market for derivative financial instruments. Legal relations between these participants arise during the issuance of derivative securities, the execution of derivative contracts, transactions involving derivative securities, agreements to replace a party to derivative contracts, and fulfilling obligations under derivative financial instruments.

An analysis of global exchange market statistics, released by the Futures Industry Association (FIA) in Figure 1, indicates that record activity was observed among participants on the world's leading exchange platforms in 2023.

The number of trades executed on exchanges reached a new all-time high of 34.82 billion, representing a 20.2% increase. This emphasizes the critical role of derivatives globally. The US dollar maintains its top position in the derivatives market, with the highest number of contracts traded. The euro and pound sterling follow as the second and third most traded currencies, respectively. However, in recent years, there has been a rise in the number of transactions in dollars and pounds sterling, while the number of transactions in euros has been declining.

It is important to note that the process of globalisation has led to an increase in the significance of exchange trading for stabilising

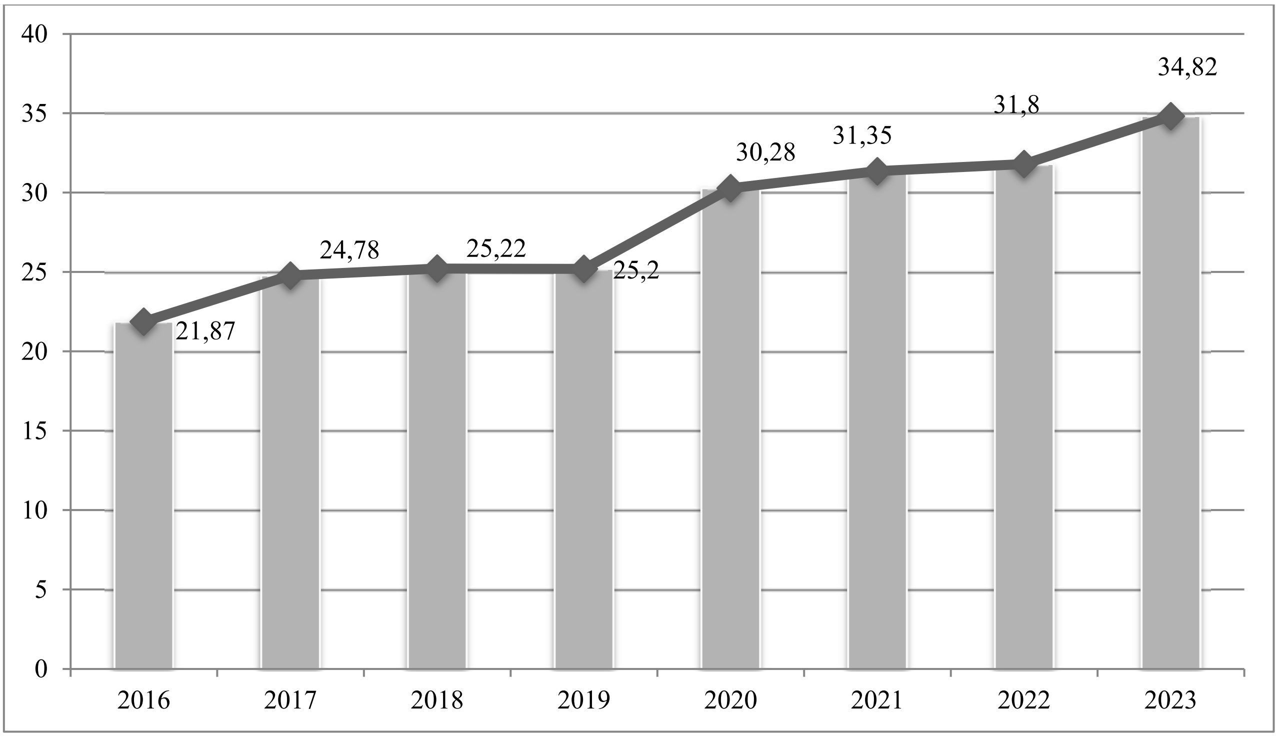

Figure 1. Dynamics of derivatives trading on the global stock market in 2016-2023, billion transactions

Source: compiled on the basis of [4–9]

financial markets. The competitiveness of exchange platforms on a global scale contributes to the consolidation of exchanges, the continual improvement of their technological capabilities, and the availability of a wide range of instruments that can cater to the needs of even the most demanding traders and hedgers. Over the past decade, there has been a notable shift in the comparative structure of global exchange trading, with financial instruments holding a significant dominance over commodity derivatives (as seen in Figure 2).

In 2020 and 2023, the share of financial derivatives on stock indices increased from 30% to 33%, while exchange trading in securities, mainly stocks and bonds, remained unchanged at 19%.

In 2021, the trading share for interest rate derivatives declined by 1%, with a total of 15%. Meanwhile, the trading share for financial derivatives that involve foreign exchange rates increased by 1%, reaching a total of 13%. In the category of commodity derivatives, the share of energy decreased by 4% over the year, accounting for only 5%. On the other hand, the share of commodity derivatives involving agricultural products remained steady at 5%. In addition, the share of non-ferrous metals trading dropped from 7% to 5%.

According to recent data, the United Kingdom has the highest market share of over-the-counter (OTC) financial instruments among European countries, with a global market share of more than 43%. Switzerland ranked second on the list with 3%, followed by France with approximately 2%. Interest rate contracts are the most significant type of derivatives, and they account for the largest share. The reason behind the strong demand for these derivatives is due to the constant changes in the interest rates of loans and investment projects in a market economy. Companies cannot quickly adjust to these changes, and loans can become unavailable to them. Therefore, interest rate derivative contracts can help allocate the interests of participants with high and low creditworthiness.

Foreign exchange contracts are the second largest type of derivatives transaction. There are some notable differences between the structure of foreign exchange contracts and interest rate contracts. Forward contracts are a very common instrument in the FX derivatives trading process. On the other hand, swaps are the most prevalent type of contract in the structure of interest rate contracts – they make up more than 70% of all interest rate contracts. As a result, swap interest rates are more popular than forward interest rates. This is because under an interest rate swap contract, a company with a lower credit rating can raise funds at a fixed foreign currency rate, which significantly reduces the credit risk that would arise from conventional bank lending.

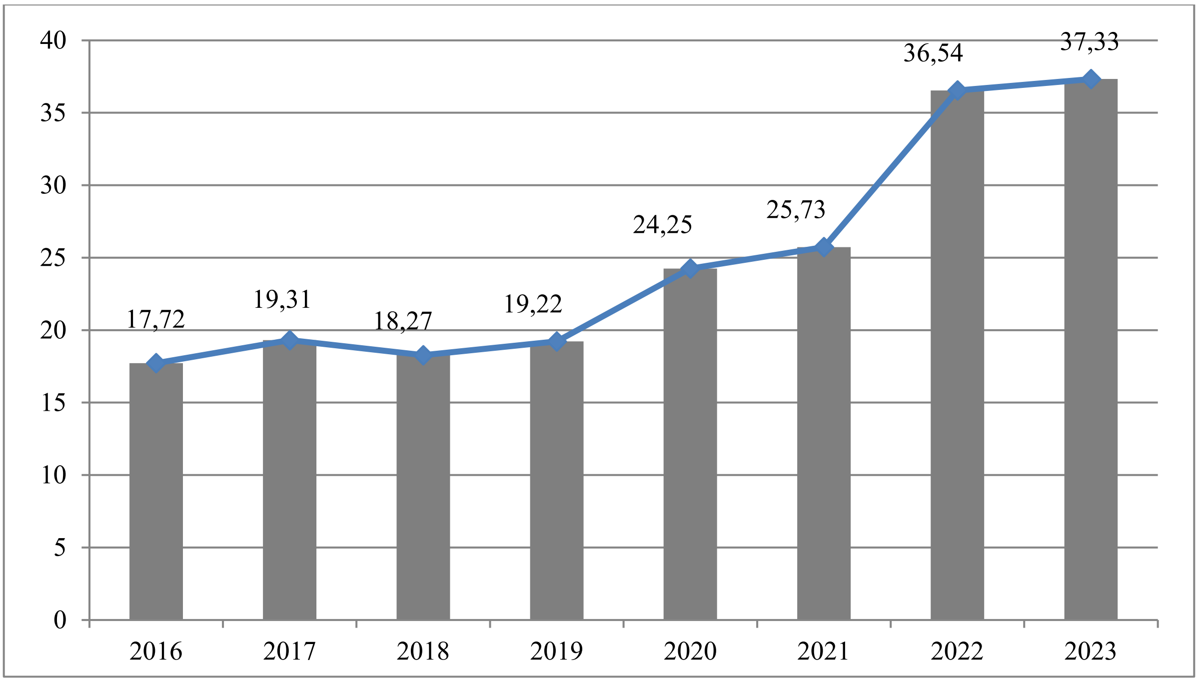

Figure 2. Dynamics of global exchange trading of derivatives in 2017–2023, billion transactions

Source: compiled on the basis of [4–9]

Between 2016 and 2023, there was a clear increase in the number of options transactions on the global market, as shown in Figure 3.

In 2018, the value of global futures trading increased by 19.27% to 14.48 billion transactions. The following year, in 2019, trading volume continued to grow with a similar upward trend to 15.98 billion transactions, representing a 10.35% increase. However, in 2020, the volume of futures trading experienced a decline of 6.7% to 14.84 billion transactions. In 2021, the volume of contracts rebounded with a 15.57% increase to 17.15 billion transactions, as seen in Figure 4.

The options market has a global turnover of USD 61.497 trillion. North America and Europe have always been the leaders in this market, accounting for the majority of all trading activities. Regarding over-the-counter (OTC) trading, there are still nine countries that actively use this instrument based on the average daily

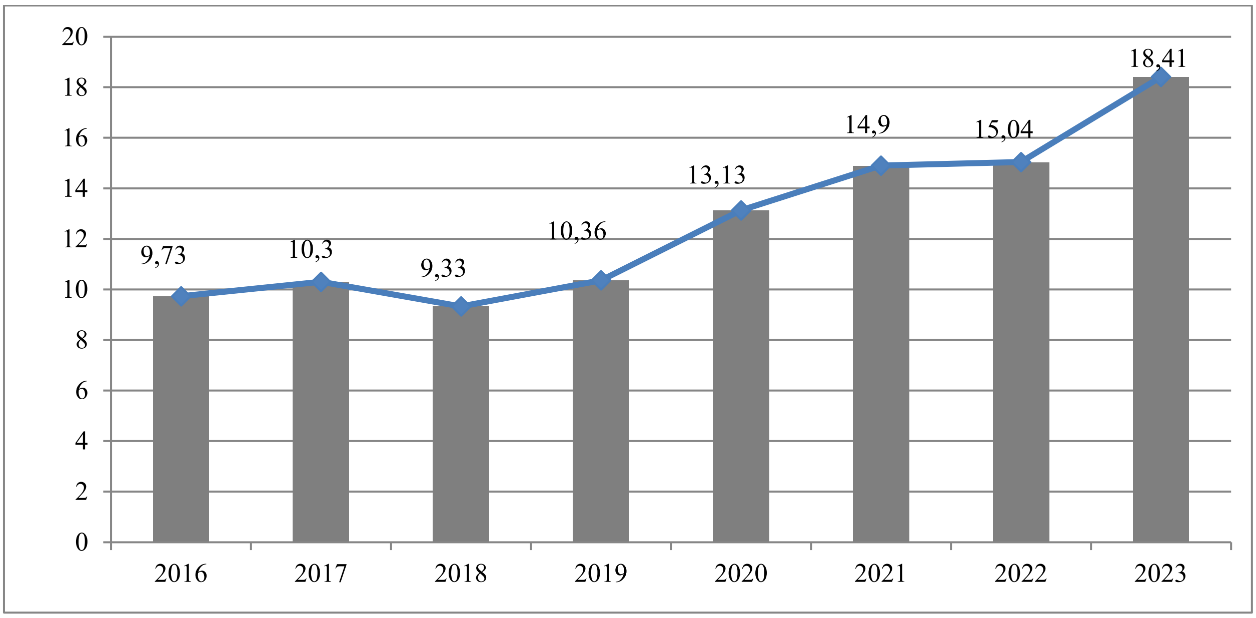

Figure 3. Dynamics of options trading on the global stock market in 2016-2023, billion deals

Source: compiled on the basis of [4–9] turnover in the FX and interest rate derivatives market. The UK conducts a massive number of trades every day, accounting for approximately 37% of the total turnover.

During the years 2017 and 2023, the Ukrainian securities market experienced a decrease in the trading volumes of derivatives. In 2017, the volume was UAH 6,516.48 million and it decreased to UAH 2,641.1 million in 2020, which is a decline of -47.38%. In 2021, the volume dropped even further to UAH 209.54 million, which represents a huge decline of -92.07%.

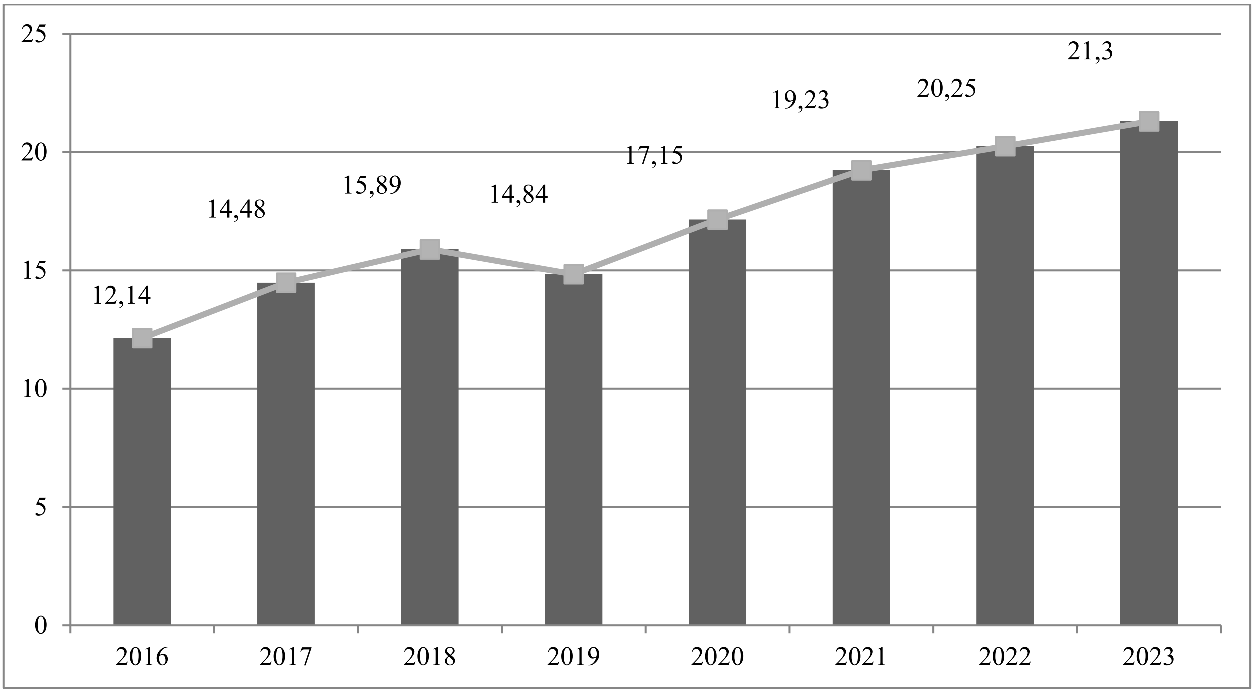

Figure 4. Dynamics of futures trading on the global stock market in 2016–2023, billion transactions

Source: compiled on the basis of [4–9]

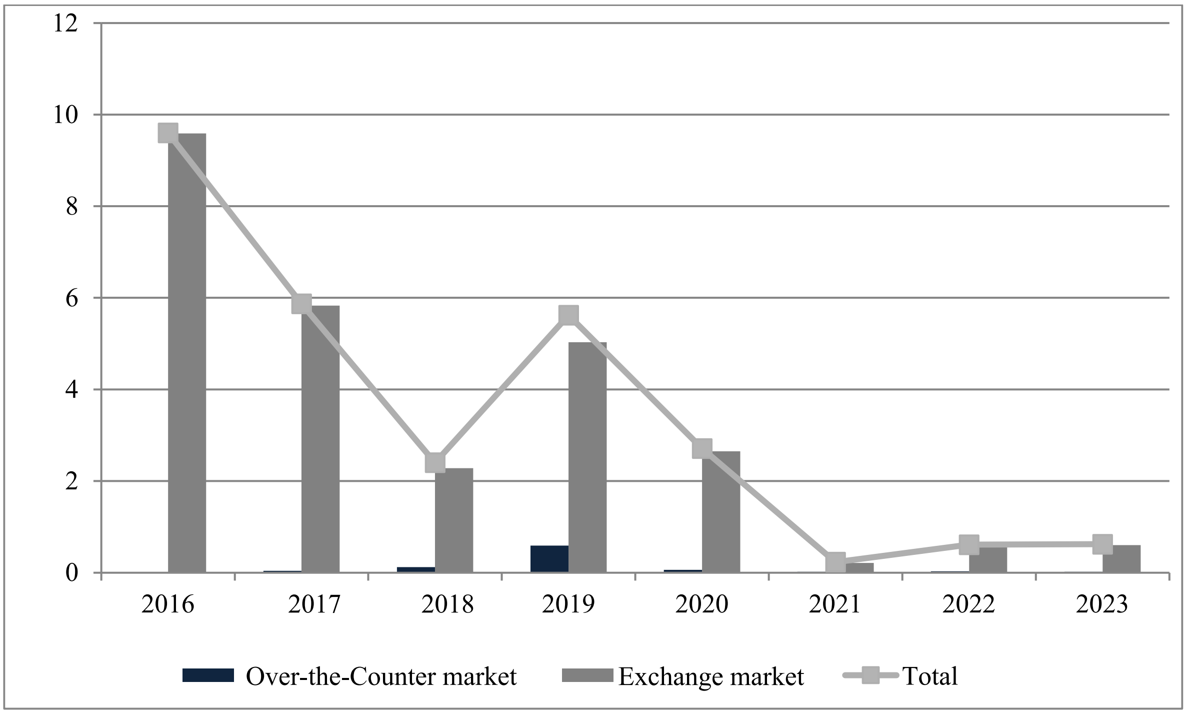

Figure 5. The volume of derivatives trading on the exchange and over-the-counter markets in 2016–2023, UAH billion

Source: compiled on the basis of [4–9]

The largest share of derivatives trading in the securities market was recorded in 2019 when it reached over 2.44%, and the smallest in 2021, when it reached 0.07% (Figure 5).

The volume of derivatives trading on the stock exchange market in 2020 was UAH 2.65 billion. When broken down by type of market, all transactions were carried out in the derivatives market section.

Currency futures contracts (UAH 1.59 billion) and commodity futures (UAH 223.7 million) were in demand on the stock exchange market in 2020.

In Ukraine, the volume of derivatives in the securities trading structure is 0.07. Capital Times LLC (UAH 1.47 billion) and Dragon Capital LLC (UAH 0.9 billion) were the two securities traders who concluded the largest volume of exchange contracts with derivatives. In the unorganized market, contracts worth UAH 52 million were executed with option certificates from the issuer Belfort Company LLC.

The domestic derivatives market is still in its early stages and is closely linked to other financial markets since derivatives are based on assets or indices traded in these markets. Derivatives help manage risks related to exchange rates, interest rates, and prices for real market participants, allowing them to generate profits quickly by increasing their market value. After analysing the derivatives market, we have identified the following trends and development prospects, which are illustrated in Figure 6.

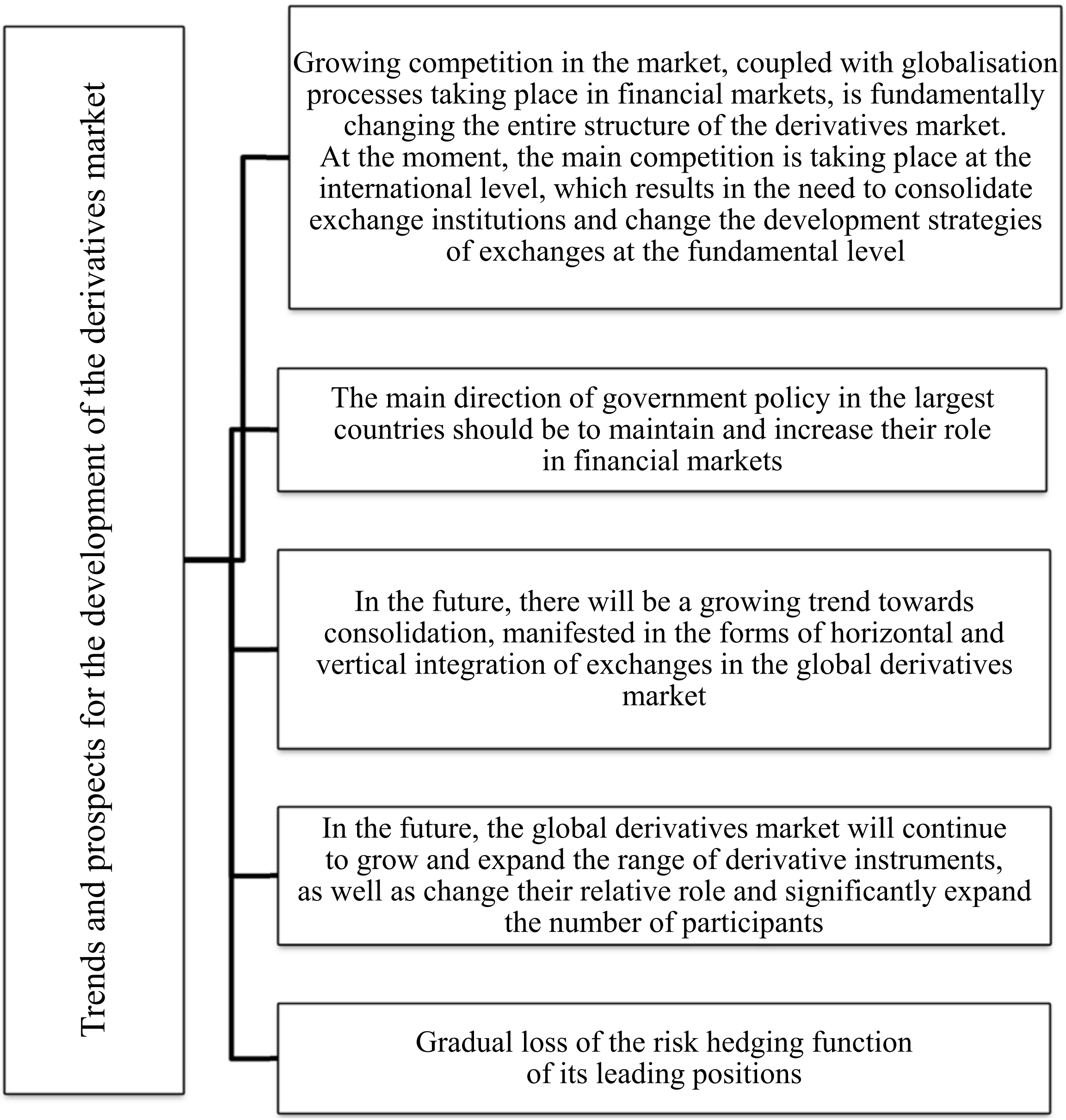

Figure 6. Trends and prospects for the development of the derivative financial instruments market

Source: [10]

The factors that are preventing the growth of the derivatives market in Ukraine are mainly due to systemic issues such as legislative gaps, underdeveloped infrastructure of the derivatives market, and the current state of development of the underlying asset markets. Additionally, internal factors such as the risk level of operations in the derivatives market also contribute to the hindrances. The primary risks that are inherent in the derivatives market include currency risks, interest rate risks, credit risks, and operational risks.

Conclusions. In the current stage, only certain aspects of the market are regulated by inconsistent and poorly coordinated laws and regulations. However, steps are being taken to create a civilised derivatives market in Ukraine with the support of international experts from USAID, the EBRD and the IMF, as well as MPs from the Parliament Committee on Financial Policy and Banking. Amendments to laws that incorporate international experience in the use of derivatives were prepared and adopted to comprehensively regulate the functioning of the derivatives market, as well as to regulate the activities of regulated markets and build their infrastructure, and to introduce instruments to protect market participants. It can be concluded that the country needs to create an efficient and developed financial market, including the derivatives market, to become a worthy competitor in the global financial market.

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ПРОБЛЕМИ ТА ПЕРСПЕКТИВИ РОЗВИТКУ РИНКУ ФІНАНСОВИХ ДЕРИВАТИВІВ

У статті досліджено проблеми та перспективи розвитку ринку фінансових деривативів. Сучасний ринок фінансових деривативів постійно розвивається та змінюється під впливом нових технологій, регулювання та глобалізації. Однак умови функціонування ринку деривативів не задовольняють потреби національної економіки та вимагають вдосконалення їх діяльності з метою забезпечення стабільності та ефективності функціонування фондового ринку. Під час дослідження був проведений аналіз динаміки торгівлі деривативами на глобальному ринку та дана оцінка динаміки світової біржової торгівлі фінансовими деривативами, проведений аналіз обсягів торгівлі деривативами на фінансовому ринку України, оцінений обсяг торгів на біржовому та позабіржовому ринках, наведена динаміка обсягів біржових контрактів та частки торгів фінансовими інструментами на ринку цінних паперів. На підставі проведеного аналізу ринку похідних фінансових інструментів запропоновані заходи щодо його розвитку. Зокрема: забезпечення комплексного регулювання питань функціонування ринку деривативів, впровадження ефективного механізму моніторингу та контролю за угодами з деривативами, створення механізмів хеджування ризиків і зменшення можливих збитків з використання деривативів, створення конкурентоспроможного ринку деривативів в Україні, вдосконалення діючого законодавства.

Ключові слова: похідні фінансові інструменти, опціони, ф’ючерси, ринок фінансових деривативів, глобальний біржовий ринок, світовий фінансовий ринок, хеджування ризиків.