

FUTURES CONTRACTS AS A HEDGING TOOL FOR CURRENCY RISK IN UKRAINE**Seysebayeva N. G., Denisenko A. A.***Zaporizhzhia National University
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futures contract, currency risk, hedging, derivatives, stock trade.

The article discusses the concept, principle and purpose of hedging as an approach to price and currency risk management. The main currency risk hedging instruments are specified. Also the main currency risk hedgers and foreign exchange futures peculiarities have been identified.

The state and dynamics of derivatives market development in Ukraine have been studied. The types of derivatives that are most in demand on exchanges have been identified. The volume and share of derivatives in the traders' exchanges were analysed. The basic prerequisites that have formed the necessity of development of the currency derivatives market in Ukraine are indicated.

Advantages and disadvantages of using foreign exchange futures to minimize enterprises and agricultural producers currency risks have been defined. The main problems impeding the development of the domestic derivatives market and reasons for the low use of hedging instruments in Ukraine have been identified, in particular: lack of investment, reduction in derivatives transactions, underdevelopment of derivatives needed for hedging, insufficient infrastructure for futures trading, low awareness of economic agents of the possibilities of hedging through derivatives transactions, domination of speculative motives.

Based on the derivatives market characteristics in Ukraine, recommendations to expand the monetary market and create conditions for the spread of financial risk hedging have been proposed.

ФІОЧЕРСИ ЯК ІНСТРУМЕНТ ХЕДЖУВАННЯ ВАЛЮТНИХ РИЗИКІВ В УКРАЇНІ**Сейсебаєва Н. Г., Денисенко А. А.***Запорізький національний університет
Україна, 69600, м. Запоріжжя, вул. Жуковського, 66***Ключові слова:**

ф'ючерс, валютний ризик, хеджування, похідні цінні папери, біржова торгівля.

У статті розглянуто поняття, принцип та мета хеджування як одного з підходів до управління ціновими та валютними ризиками. Зазначено основні інструменти для здійснення хеджування валютних ризиків. Визначено основних хеджерів валютних ризиків та особливості валютних ф'ючерсів. Досліджено стан та динаміку розвитку ринку похідних фінансових інструментів в Україні. Визначено, які деривативи користуються найбільшим попитом на біржах. Проаналізовано обсяг та питому вагу торгів деривативами на організаторах торгівлі. Зазначено основні передумови, які сформували необхідність розвитку ринку валютних деривативів в Україні. Виявлено основні закономірності функціонування ф'ючерсного ринку в Україні та охарактеризовано основні позитивні та негативні тенденції. Охарактеризовано особливості ф'ючерсу на курс долар США на Українській біржі. Окреслено перспективи розвитку торгівлі ф'ючерсними контрактами на зернові культури. Визначено переваги і недоліки використання валютних ф'ючерсів для мінімізації валютних ризиків підприємств та агровиробників. Визначено основні проблеми, що стримують розвиток вітчизняного ринку деривативів та причини низького використання інструментів хеджування в Україні, зокрема: відсутність інвестицій, скорочення обсягів операцій з деривативами, нерозвиненість необхідних для хеджування деривативів, недостатній рівень розвитку інфраструктури для ф'ючерсної торгівлі, низька поінформованість суб'єктів господарювання про можливості хеджування за допомогою операцій з деривативами, домінування спекулятивних мотивів. На основі особливостей функціонування ринку похідних цінних паперів в Україні рекомендовано розширювати інструментарій строкового ринку та створювати умови для поширення практики хеджування фінансових ризиків.

Problem statement

Due to the large fluctuation of UAH against the main foreign currencies during the financial crisis and the expansion of the foreign economic operations of economic agents, the problems of financial risk management are particularly relevant. From this point of view, hedging is the most popular method of price and currency risks management. In Ukraine, however, this mechanism is not sufficiently developed and is not popular among economic entities, which means that the financial results of their activities are more uncertain. Therefore, for optimal currency risks management strategy construction in Ukraine there is a need to study world practice of futures contracts usage.

Recent research and publication analysis

Scientific development of domestic scientists as M. O. Solodkiy, V. O. Yavorskaya, O. L. Zakharova, L. Primostka, V. M. Shelydko, O. Sokhatsky and others are focused on problems of the financial derivatives use. Some issues of currency derivatives use have been studied in the works of S. G. Sklyaruk, O. M. Pokhanenko. Considering the significant results of scientific achievements, it should be noted that a number of theoretical and practical questions of the derivatives market of Ukraine functioning require further study and analysis.

The purpose of the article

In modern times, currency relations play a large role because financial market activity is global. Therefore the purpose of the article is to identify the main trends in the derivatives market in Ukraine and to elaborate recommendations on the currency futures transactions intensification for ensuring a stable exchange rate and an improvement of economy.

The main material representation

The expansion of Ukraine's cooperation with the EU broadens the domestic enterprises' possibilities of entering the European market, creates the potential for the growth of export-import operations, the intensification of capital transfer and, consequently, the increase of payments in foreign currency. In turn, the unpredictability of the exchange rate and the insufficient number of currency hedging instruments can lead to potential losses and complicate business planning.

The term "hedging" is derived from the English "hedge" - fence, barrier, protection. Hedging aimed at insuring financial risks [1]. And also hedging is one of the approaches of risk management that uses derivatives for systematic asset price or cash flow changes risk neutralization [2].

The economic essence of hedging is, in most cases, the use of futures and options to reduce price risk in the spot market [3].

Hedging is based on the principles of correlative price movements in the spot and futures markets. The higher the correlation, the more effective the price risk hedging will be [3].

The historical origin of hedging is closely linked to the development of commercial activities in the agricultural market. Moreover, at the end of the last century, fundamental changes in the world financial market also contributed to the spread of hedge elements to exchange-rate, securities and interest-rate markets. Thus, from the grain trade, hedging has spread to other financial activities.

The phenomenal growth in trade futures and options for agricultural commodities has been driven by increased global demand and the increasing use of e-commerce systems.

Timely issuance of futures contracts is a valuable risk management tool, as it fixes prices and provides protection against undesirable changes. In other words, it provides a purchase or sale price for those who are interested in price protection and are willing to forgo additional benefits if the price changes are favourable [1]. Hedging helps to avoid price and inflation risks in stock and commodity exchanges contracts. The hedging principle is to open opposing positions in the money and futures markets.

Therefore, as the price of one item increases, the price of the other item falls. If the price of a hedger's position in the money market increases, its position in the futures market decreases, and the hedger may be required to provide additional collateral (margins) [2].

Consequently, hedgers invariably buy or sell futures or options contracts on assets they wish to hedge in the spot market. However, futures positions will continue until the end of the purchase and sale of real assets [2]. Hedging aimed at maximizing the predictability of future cash income generated by an enterprise's economic activity. Stock-exchange contracts of options and futures are the main instruments for price risk hedging [2].

Futures hedging is a common species. Futures exchange trading is standardized, has high liquidity of instruments and secures contract settlements using a margin system that is deposited by market participants. [3].

In world practice, foreign exchange futures are used to hedge foreign exchange risks - a standardized agreement certifying the obligation to exchange one currency for another at a certain time and under certain conditions in the future [3].

Currency hedging is aimed at protecting money from adverse exchange rate movements, i.e., fixing the present value of money through futures transactions. Each company whose financial outcome depends on exchange rate fluctuations has an interest in instruments to offset financial risks. The main hedgers in the market are [3]:

- importers of an elementary foreign production base who regularly purchase electronic equipment of foreign manufacture; their interest is to protect against possible increases in the prices of imported goods;
- companies that have on the balance sheet a currency as income from the sale of goods (works or services); their interest is to protect the currency against a likely exchange rate depreciation;
- companies that attract currency borrowing at floating or fixed interest rates; their interest is to protect against the

likely increase in the value of the currency to be returned to the creditor.

The risk of exchange rate fluctuations disappears by hedging. This allows for advance planning of economic activities and financial results, as well as pricing of the enterprise's goods, works and services.

The advantages of hedging foreign exchange risks as a way of ensuring the economic security of an enterprise are: small costs for the business entity to hedge risks:

possibility of fixing foreign exchange quotations at a certain date and planning the business for the future. Unfortunately, spot deals dominate in Ukraine, and cases of hedging of currency risks in business are still isolated. The derivatives market is the least developed in the structure of the national financial market. According to the annual report of the National Securities and Stock Market Commission, in 2019 the share of derivatives traded was 0.03% of the total amount traded on the stock market of Ukraine (fig.1).

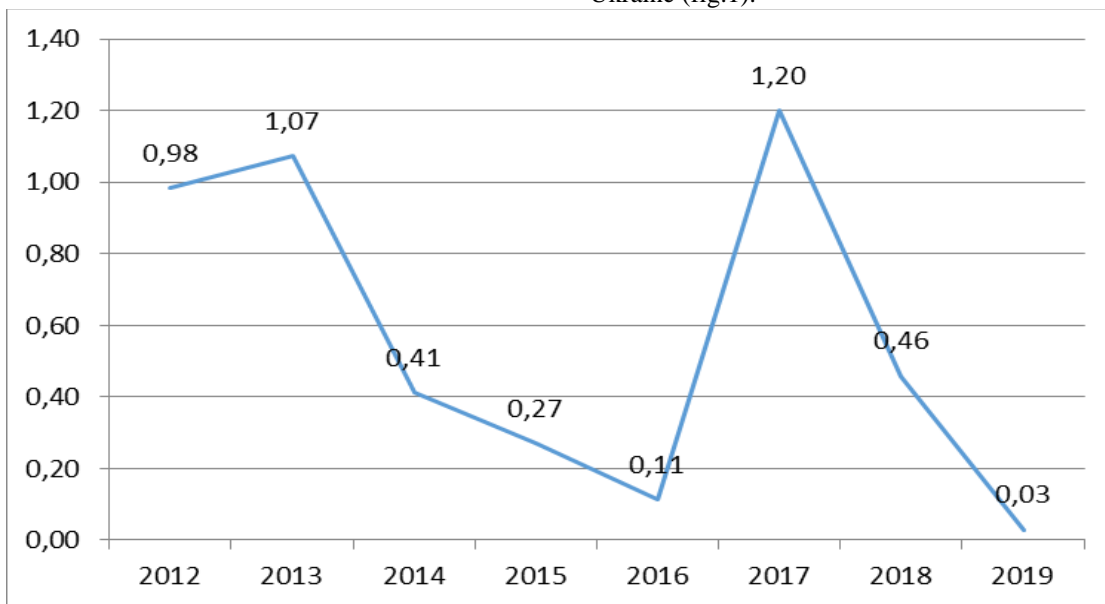


Figure 1. Share of derivatives traded on the stock market of Ukraine in 2012 – 2019, % Source: Compiled by the authors from the [4]

Trading on the futures market of the Ukrainian Stock Exchange began in 2010, but was suspended in 2018 due to the ban of the National Security and Defense Council of Ukraine on the use of the trade system software. Two years later, the Ukrainian Stock Exchange resumed trading with new software.

Currency futures contracts appeared only in 2015 on the «Ukrainian Exchange», but very quickly gained high

popularity and in 2017 were the most in demand among other derivatives (fig. 2).

In 2017 derivatives were produced by two option certificates for a total value of UAH 32.5 million. According to the results of 2017, the volume of trade in derivatives amounted to 5.62 billion UAH. The most popular type are forward contracts for currency pairs: GBP/USD, USD/UAH, EUR/USD, USD/JPY.

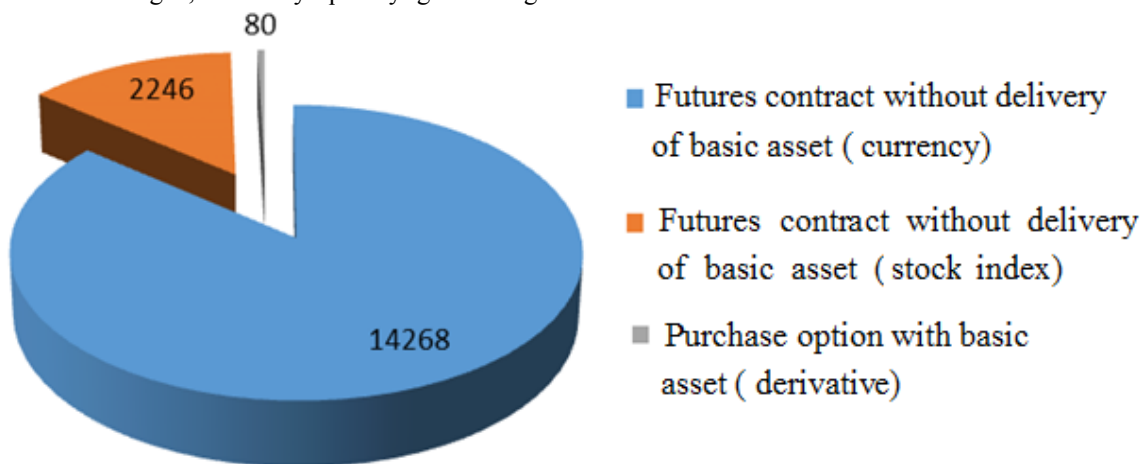


Figure 2. Derivatives that were in demand at JSC «Ukrainian Exchange» in 2017 Source: Compiled by the authors from the [5].

In the derivatives market in 2012-2019, there was a strong downward trend in the stock market, from UAH 24.91 billion UAH in 2012 to 0.22 billion UAH in 2019, or 99.1 per cent (fig. 3).

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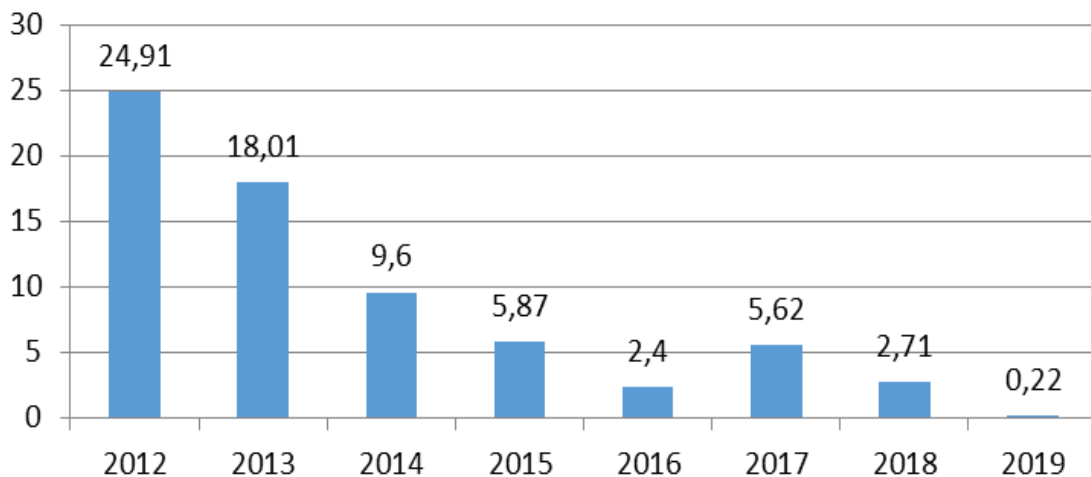


Figure 3. Volume of derivatives traded on the securities market in 2012-2019, bln UAH
Source: Compiled by the authors from the [4]

This shows the unpopularity of derivatives, as well as the underdeveloped infrastructure of the Ukrainian stock

market for transactions of increased complexity. In January-December 2019, two exchanges «Perspective» and «UMVB» traded derivatives (Tab. 1).

Table 1. Volume and share of derivatives traded on traders' exchanges during 2017 - 2019

Trader	2017		2018		2019	
	Bln. UAH.	Share, %	Bln. UAH.	Share, %	Bln. UAH.	Share, %
Perspective	1455,24	1,14	797,60	0,63	205,18	0,11
Ukrainian Stock	3178,21	23,71	1843,52	8,78	0,00	0,00
Ukrainian Interbank Currency Stock	0,00	0,00	0,03	0,86	4,36	100
Universalna	398,60	100,00	0,00	0,00	0,00	0,00
Total	5032,05	1,20	2641,15	0,46	209,54	0,03

Source: Compiled by the authors from the [5].

Thus, it can be stated that the derivatives market does not meet the development needs of the national economy and does not fulfil its main function - hedging the market participants risks. Given the uncertainties in Ukraine, it is particularly important to use efficient instruments in the financial services market, especially futures trading.

The development of futures trading in Ukraine is hindered by a number of factors. First, there is a lack of investment, a lack of confidence in the financial market, and an inadequate domestic legal framework. Second are the difficult conditions for a market economy, the lack of necessary infrastructure for futures trading, Lack of qualified personnel of securities traders capable of organizing currency activities and inflation.

In spite of these problems and difficulties, Ukraine has taken some steps to promote futures trading. A new stage in the development of Ukraine's futures market began in August 2020, when the renewal of the Ukrainian

settlement contract at the US dollar rate began. Dragon Capital and Freedom Finance Ukraine signed the first agreement on a futures contract for USD/UAH [7]. Contract specification remained unchanged (Tab. 2).

The implementation (expiration) of the DX-0 contract took place on December 15, 2020. Futures are also available as of March 2021 (DXH1) [7].

The market is now in the phase of connecting former and new entrants. The UAH/USD futures will provide banks, traders, and end investors with additional trading opportunities, including the ability of market participants to hedge their foreign exchange positions.

The UAH/UAH currency futures are now a sufficient tool for currency hedging against the risks of USD/UAH fluctuations. Private Ukrainian investors are interested in this derivative as an opportunity to earn money from currency fluctuations.

Table 2. Specification of the futures exchange rate of UAH-USD - DX

Contract Code	DX<month of the implementation><year of the implementation>
Basic asset	USD/UAH currency rate
Value of contract	1000 (one thousand) USD
Type of contract	calculated
Contract price	UAH per 1 (one) USD
Minimal price step	0,005 UAH
Cost of price step	5,00 UAH
Minimal warranty provision	20%
Transaction fee (contract registration)/scalper	2,00 UAH / 1,00 UAH

Source: Compiled by the authors from the [9]

Another important event in the development of stock trading in Ukraine is the opening of futures contracts for crops on the Ukrainian Exchange at the end of 2018. Previously, all transactions in Ukraine were carried out with the calculation of futures but without offering the base asset, and were mainly of interest only to financial market participants. Instead, asset-backed futures would be a way to hedge financial and price risks to farmers.

In addition, consumers and agricultural processors will also become less sensitive to price fluctuations and will be able to assess their performance more effectively in the long term. The futures contract with the delivery of the underlying asset is a contract under which the seller undertakes to deliver the underlying asset and the buyer undertakes to pay and accept the asset at an agreed price and within the terms and conditions of the contract [8].

Ukrainian farmers, in addition to the volatility of world grain prices, also face foreign exchange risks. Under the

influence of fluctuation of the UAH exchange rate during the period from January 2017 to November 2019, the gross revenue of market participants fluctuated from -581 UAH/t to 325 UAH/t [8].

Thus, the unpredictability of the exchange rate and the insufficient number of currency hedging instruments can lead to potential losses for farmers and complicate business planning. Trading agricultural futures with the supply of assets will improve efficiency and fairer pricing of agricultural products and prevent monopolization of the grain market in some areas.

The developed market of currency derivatives will allow bankers, enterprises and individuals to obtain daily information on the trends in the exchange rate of UAH in the future, and protect the hryvnias from devaluation through currency futures. The main advantages and disadvantages of using derivatives to hedge foreign exchange risks are (Tab. 3).

Table 3. Advantages and disadvantages of using derivatives to hedge foreign exchange risks

Advantages		Disadvantages	
1.	– When using a company’s foreign exchange derivatives, there is no need to create significant reserves to cover exchange rate losses; the company’s money is not diverted from sales and can be used for productive activities;	1.	– To guarantee payment under standard contracts, deposit margin may be required, which may be increased for financial instruments of volatility and significant hedging conditions, thus diverting funds from business turnover;
2.	– The ability to monitor the prices and volumes of trade in financial derivatives in an organized market allows the selection of an optimal strategy for hedging foreign exchange risks;	2.	– Standardizing the form of the stock exchange contracts (fixed lot sizes and duration) makes it impossible to use fixed-term contracts with an arbitrary amount of contract and duration of performance fully satisfying the economic entity;
3.	– high liquidity. If necessary assets can easily be resold at a good rate.	3.	–the payment of commissions on foreign exchange hedging contracts is an additional cost to an enterprise.

Source: Compiled by the authors from the [3]

Conclusions

Given the high level of foreign exchange risk, the move towards flexible exchange rate formation and the growing interest of domestic entrepreneurs in entering international markets, the need to develop a derivatives market in Ukraine is obvious. Risk hedging mechanisms are needed by most economic agents, but not all domestic

entrepreneurs have access to international stock exchanges. Creating and activating a native futures market that meets the needs and capabilities of domestic producers is therefore the most realistic and promising direction for development.

However, an analysis of the domestic derivatives market showed:

- reduction in derivatives contracts;
- underdevelopment of major foreign exchange derivatives in Ukraine and concentration of trade in foreign exchange derivatives on one stock exchange;
- insufficient development of the relevant infrastructure, in particular an efficient clearing and market-making institutions;
- low awareness among economic agents of the possibilities of hedging through derivatives;
- high dependence on the activities of individual players and insufficient participation of institutional investors in the market;

- domination of speculative motives

In order to spread the use of foreign exchange derivatives by domestic enterprises the main tasks to be solved are:

- adaptation of domestic legislation to European standards, development of trade infrastructure, Increase the liquidity of derivatives;
- broadening the range of participants by providing an effective mechanism to attract individual and institutional investors to the exchange trade;
- expanding the market-based tools;
- ensuring of transparency and accessibility of derivatives transactions on the stock market.

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