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## THE THEORETICAL BASIS OF FINANCIAL INSTRUMENTS RESEARCH IN THE WORLD ECONOMY SYSTEM

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The results of research on the theoretical basis for determining the nature and role of financial instruments in the world economy system are presented in this article. The systematization of the theoretical research approaches of financial instruments in the world economy system, determination of derivatives market factors which influence the development of international business, as well as justification of scientific and practical recommendations for improvement of derivatives market infrastructure management are the purpose of this research. It has been noted that the fact that international business subjects reach their efficiency limits (in terms of income and expenses) for a number of reasons, both subjective (shortcomings of the control systems used by them) and objective (the impossibility of further reducing costs due to the limitations of existing technology production and demand for products) encourages economic actors to search for new opportunities for obtaining economic benefits including using financial instruments, particularly, derivatives. In the course of the research the types of financial instruments, conditions of stable derivatives market functioning have been analyzed, as well as derivative financial instruments market factors which influence the development of the international business have been identified. Over the course of the research the peculiarities of internal and external regulation of derivative financial instruments market have been identified. The author proposes scientific and practical recommendations on derivative financial instruments market infrastructure management improving in the world economy system, in particular: 1) improving the risk management system for derivative financial instruments and basic assets with the most extensive range of participants in this market; 2) the establishment of rational requirements for the amount of equity capital of market participants, taking into account both price and interest, and credit risks; 3) improving the quality of statistical reporting standards with disclosure of information for public access; 4) reforming legal rules related to offsetting agreements and the bankruptcy of multinational corporations; 5) coordination of actions of national and international authorities in the regulation of markets for derivative financial instruments on a global scale.

**Keywords:** financial instruments; derivatives; derivatives market; financial innovations; risk hedging in international business; financial assets; exchanged-listed and over-thecounter (OTC) derivatives market

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## ТЕОРЕТИЧНІ ЗАСАДИ ДОСЛІДЖЕННЯ ФІНАНСОВИХ ІНСТРУМЕНТІВ У СИСТЕМІ СВІТОВОГО ГОСПОДАРСТВА

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Харківський національного університету імені В.Н. Каразіна У статті наведено результати дослідження теоретичних засад визначення сутності та ролі фінансових інструментів у системі світового господарства. Метою статті  $\epsilon$ систематизація теоретичних підходів дослідження сутності інструментів у системі світового господарства, визначення факторів впливу ринку похідних фінансових інструментів на розвиток міжнародного бізнесу, а також науково-практичних рекомендацій удосконалення обгрунтування шодо інфраструктури управління ринками похідних інструментів. фінансових Зазначено, що досягнення суб'єктами міжнародного бізнесу межі ефективності (з точки зору доходів і витрат) по ряду причин як суб'єктивних (недоліки використовуваних ними систем управління), так і об'єктивних (неможливість подальшого зниження витрат у зв'язку з обмеженнями існуючих технологій виробництва і попиту на продукцію) спонукає економічних суб'єктів до пошуку нових можливостей отримання економічної вигоди, у тому числі використовуючи фінансові інструменти, зокрема деривативів. У ході дослідження проведено аналіз видів фінансових інструментів, умов стабільного функціонування ринку деривативів, а також визначено фактори впливу ринку похідних фінансових інструментів на розвиток міжнародного бізнесу. У процесі дослідження ідентифіковано особливості внутрішнього і зовнішнього регулювання ринку похідних фінансових інструментів. Автором запропоновано науково-практичні рекомендації щодо удосконалення інфраструктури управління ринками похідних фінансових інструментів у системі світового господарства, а саме: 1) вдосконалення системи управління ризиками похідних фінансових інструментів і базових активів з максимально розширеним колом учасників даного ринку; 2) встановлення раціональних вимог до розміру власного капіталу учасників ринку, які враховують як ціновий і процентний, так і кредитний ризики; 3) підвищення якості стандартів статистичної фінансової звітності з розкриттям інформації для публічного доступу; 4) реформування юридичних норм, пов'язаних з угодами про

**Ключові слова**: фінансові інструменти; дериватив; ринок похідних фінансових інструментів; фінансові інновації; хеджування ризиків у міжнародному бізнесі; фінансові активи; ринок біржових і позабіржових деривативів

взаємозаліки і банкрутства багатонаціональних корпорацій; 5) координація дій національних і міжнародних органів влади у регулюванні ринків похідних

фінансових інструментів у світовому масштабі.

**Actuality of the issue.** The globalization of financial markets contributes to the flow of international capital, strengthening and complicating the links of national financial markets and strengthening their interdependence. The

globalization of industrial production increases the possibilities of producers, intensifies competition between them, including capital, which affects the effectiveness of doing international business. Increased competition of economic entities and industries due to competition of manufacturing companies, not only for the sales market or within the same industry, but also for the material resources of investors in the global economic space significantly influenced the activity of international business entities and contributed to the creation of new tools for solving specific tasks.

The rapid development in recent years of the derivative financial product industry is the result of numerous factors, mainly related to the objective configuration of the economic and scientific-technical environment of the companies' activities. The most important among them are:

- quality race volatility prices of basic commodities and financial assets;
- the emergence and growth of the processes of globalization;
- improvement of the theoretical base of financial management;
- scientific and technical progress.

Financial innovations are driven by the needs of market actors in new financial and information technology products, which allow them to respond adequately to changes in the surrounding financial environment, reduce risk in decision making and ensure the effective management of international business, allowing borrowers and creditors, professional participants of market and private investors to hedge interest and currency risks that use arbitration opportunities of euro markets, and at favorable conjuncture to realize speculative strategy. These circumstances determine significant actuality of the research.

Analysis of recent research and publications. The essence, the functions of various types financial tools, as well as the regularity of the development at the international derivatives market are highlighted in both domestic and foreign economic literature. Bazilevych V.D., Sheludko V.M., Kovtun N.V. dedicated their works to the mechanism of functioning of futures, forward and option markets, pricing models for derivatives markets [1]; Matsuk Z. A., who analyzed the nature and functions of credit derivatives in the securities market, as well as their role in the activities of financial institutions [2; 3]; Goncharenko N.I. systematized approaches of credit default swaps in the context of study impact credit rating on the investment attractiveness of the sovereigns [4]; Jones F.J, Modigliani F.P. and Fabozzi F.J. thoroughly investigated the features of the functioning of the national market

of financial derivatives and the methodology for determining the market value of various types of derivative securities, as well as option strategies and hedging mechanism of using derivatives [5]; Hull J.C. analyzed the essence, the history of development and the importance of derivative securities markets within modern economic system, considered the features of the implementation of operations with interest futures, swaps and additional functions [6]; Sokhatska O. M., who made retrospective analysis of international derivatives market [7], Oparin V., Prymostka L.O. analyzed the evolution, dynamics and structure of international derivatives tools market in the end of the twentieth century - at the beginning of the XXI century [8].

The content and the role of financial innovation, their influence on the development of financial systems and institutions are studied in the works of foreign scientists H. Ber, S. Valdez, W. Edwards, D. Madur, F. Mishkin, H. Merton, F. Mulino, S. Frost and others. Their research proves the increasing impact of innovation on modern financial processes, diversification and increased number of instruments of transfer risks.

However, in our opinion, insufficient attention is paid to the issues of impact of financial instruments on international business development and problems of regulation of the derivatives market in the world economy system.

The purpose of the article is systematization of the theoretical research approaches of financial instruments in the world economy system, determination of derivatives market factors which influence the development of international business, as well as justification of scientific and practical recommendations for improvement of derivatives market infrastructure management.

Statement of the main research. Over the past 50 years, there has been an acceleration in the development of financial sector international business. There are both quantitative and qualitative changes: the number of transactions and the number of market participants are increasing, the nominal volume of all market segments is increasing and new segments are emerging, as well as new financial instruments promote international business.

Analysis of the approaches to financial instruments allows to outline that they can be classified as money and contracts of a financial nature, the purchase or sale of which lead to financial asset from one party to the transaction and financial liabilities or equity instrument to another. It is known that there are two key points in the basis of operations with financial instruments. Firstly, such operations are secured by a contract that is legally binding, and secondly,

financial assets, financial liabilities or equity instruments are the subject of the agreement. Money is not a contract, therefore, they cannot be categorized as financial instruments, but the fact that funds belong to financial instruments is indisputable and generally recognized.

According to basis variable there are the following types of financial instruments:

- a) primary financial instruments include those with certainty involving the purchase / sale or delivery / receipt of certain financial assets, resulting in mutual financial requirements. In other words, the cash flows resulting from the proper execution of these contracts are predetermined. Such assets can be cash, securities, receivables and payables (including a loan agreement, credit agreement, bank account agreement, etc.);
- b) derivatives include financial instruments providing the possibility of buying / selling the right for the acquisition / supply of the underlying asset or the receipt-payment of income related to the configuration of some characteristics of this asset. Thus, unlike the primary financial instrument derivative, does not imply a predefined operation directly with the underlying asset. This operation will take place only under certain circumstances. Not the assets themselves are sold via derivatives, but the rights to deal with them or receive the corresponding income. Therefore, the goal of appeal to derivative financial instruments is to extract profit from price fluctuations of the corresponding exchange asset, as well as protection (hedging) against undesirable changes in market prices for the corresponding exchange asset.

In modern literature there are many definitions of the notion "Derivative" but none of them fully disclose its essence. In the article it refers to a standard document confirming the right and / or obligations to purchase or sell securities, tangible or intangible assets under certain conditions determined by it in the future. Initially, derivatives were used to insure (hedge) risks, but recently they are increasingly used to extract additional, speculative profits in international business. Any assets may act as the underlying asset of the world financial market. They mainly include the following assets: currency, interest rates, stocks, stock indices, bonds, major commodity groups, credit risk and default risk on debt instruments. The underlying assets may also include exotics and intangible assets.

Derivative contracts of the global financial market financial tools: futures; forwards; options; swaps; credit derivatives.

Among the factors affecting the derivative financial instruments from the market, it is possible to single out both stimulating factors and interference. Starting with positive factors. Due to that fact that derivative financial instruments are intended to hedge risks, they allow investors to form an optimal investment portfolio [9, p.48]. This function is performed by including derivatives in the portfolio in order to reduce the risk of strong price fluctuations on stocks, bonds, currency and precious metals. For example, using an option, you can completely eliminate the uncertainty about possible losses, since in this case the amount of losses is equal to the value of the fixed premium paid to the risk insurer (option seller). The presence of such opportunities makes investments in the financial market more attractive, and therefore allows you to attract a larger number of investors.

The second factor is information from the derivatives market, which has an impact on the financial market as a whole. For example, trace the two-way relationship between the market price of the underlying asset and the market price corresponding derivatives [9, p.47]. Market price of derivatives depends on the expectations of market participants in relation to the future market price, and market dynamics derivatives affects the determination of prices in the market of the underlying asset. Thus, the information received from the market derivatives may contribute to improvement of the information efficiency of the financial market and reduce its volatility. In this case the information is a motivating factor.

On the other hand, information may be distorted by the derivatives market [10]. Derivatives may distort the assessment of the profitability and risk of companies due to falsely generated profits and the concealment of debt. As a result, market participants cannot correctly judge the creditworthiness of such companies and the level of risk of investments in their assets in the financial market.

Another negative impact of the derivatives market is the increased risk of financial market that at first in with looking contrary to the concept derivatives as a risk reduction tool.

Derivatives market is one of the most rapidly developing segments of the global financial system. One of the conditions for the stable functioning of the derivatives market is an effective system of its regulation, which covers all the market participants and ensures the implementation of their professional activities in accordance with the established rules.

In modern conditions of development of stock and over-the-counter trading, derivative financial instruments require special regulation, and regulation of stock exchanges can be both external and internal.

The main objectives of the regulation of the exchange market are:

- maintaining order in the stock market, creating optimal conditions for working on it;
- protection of market participants from dishonesty and fraud of certain individuals or organizations;
- creating an efficient market in which there are incentives for entrepreneurship, and every risk is rewarded;
- the organization of new markets, support of exchange structures, undertakings, innovations, etc.

The state is an active participant in the regulation of exchange activities. It represents a complex of legal, administrative, economic, technical and other methods [11].

The essential moment of operations with exchange instruments is the presence of the clearing house of the exchange, which guarantees action, both seller and buyer of their obligations. A feature of modern exchanges is that the real no goods. Market participants can make deals without even ever seeing what a barrel of oil or an ounce of gold looks like. Exchange activity, which is carried out in compliance with current legislation and exchange regulations, provides the most rational distribution of commodity and financial flows, which has a positive effect on the welfare of participants.

Since each exchange has its own rules of exchange trading, ensuring the execution of transactions concluded on the exchange, there are practically no difficulties with the development of the exchange-based market. Emerging problems are associated, as a rule, with the development of the over-the-counter derivatives market, which in developed countries is many times greater than the exchange derivatives market [12].

So, the famous financier G. Soros offers to register custom-made derivatives individually, and those which are traded on the exchange, register "as a class. "At the same time, Soros notes that the five largest banks that enjoy the reputation of "market makers" are likely to be against creating regulations for derivatives, as it will affect their profits. But most of all he is surprised by the position of international corporations, which are also against such a reform. The only explanation for this he sees is that artificially created derivatives can become a tax haven or tools for manipulating revenue figures. In any case,

George Soros believes, this is not obliged to affect the adoption of legislation to regulate derivatives [13].

The world OTC derivatives market is not governed by the jurisdiction of individual countries. At the same time, the global market is so large that it can only be regulated in the mode of supranational structures. Currently regulators of the world OTC market derivatives two organizations are advocating: The International Swaps and Derivatives Association (ISDA) and The Bank of International Settlements (BIS). These organizations generally perform the following functions:

- 1) the creation of market infrastructure;
- 2) global market regulation;
- 3) unification of contracts and terms of transactions on derivative financial instruments;
  - 4) collection and analysis of market information;
- 5) control for activities of market participants. International Swaps and derivatives Association is the largest international organization uniting the main participants of the derivatives market. Created by in 1985 ISDA includes more than 800 financial institutions from 55 countries on 6 continents. ISDA members include the Largest Dealers in the derivatives market, as well as various government agencies and non-financial organizations that use derivative financial instruments to optimize their economic activities and to hedge risks [14].

In July 2010, new legislation was passed in the United States aimed at reforming financial regulation – Dodd-Frank Act (Dodd-Frank Wall Street Reform and Consumer Protection Act). The law aims to reduce risks to the financial system. It gives regulators greater authority to supervise banks and financial institutions, and also gives them the right to liquidate large problem lending institutions. The document provides that the ability of banks to conduct their own operations on the market at their own expense will be limited (the so-called Volker Rule).

However, with the introduction of the Dodd-Frank Act, a number of unresolved problems remain:

- 1. The law only instructs regulators to set limits on the so-called uncovered contracts;
- 2. In the final version of the law of regulation futures and some other contracts were ignored [15];

- 3. In the context of globalization and lack of control over the movement of capital in other countries, financial activity (including over-the-counter transactions) will begin to flow from the USA to other global financial centers: to London or Hong Kong [16];
- 4. Greater market transparency will also lead to certain difficulties in conducting large-scale operations. From this point of view, the balance between the level of detail in information disclosure and the protection of the anonymity of the participants in the transaction is important, otherwise large participants may go to other markets [17].

As part of the reform of the financial regulation system in the European Union, superpower bodies are created on the financial market. Including January 1, 2011 became operational European Service for Securities and Markets – ESMA (by European Securities and Markets is Authority). This organization will empower and watch for agencies, establishing credit ratings, and Settlement Depository, as well as participate in the board as observer clearing organizations in the EU and the backbone banks. Also, the ESMA will determine which derivative instrument is subject to centralized clearing and approve international clearing organizations. Thus, greater centralization will allow for a wider application of a unified regulation of the DFI market within the EU, smoothing the differences between individual countries.

**Conclusions**. On the basis of the research it can be concluded about the necessity of further development and strengthening of derivative financial instruments market infrastructure management (and especially OTC). In our opinion, the first priority steps should be the following:

- 1) improving the risk management system for derivative financial instruments and basic assets with the most extensive range of participants in this market;
- 2) the establishment of rational requirements for the amount of equity capital of market participants, taking into account both price and interest, and credit risks;
- 3) improving the quality of statistical reporting standards with disclosure of information for public access;
- 4) reforming legal rules related to offsetting agreements and the bankruptcy of multinational corporations;
- 5) coordination of actions of national and international authorities in the regulation of markets for derivative financial instruments on a global scale.

Thus, analysis of the derivative financial instruments market allows us to conclude that it can have a stimulating effect on the financial market, and also create interference for its operation. Also, the derivative financial instruments market can be considered as a subjective factor, since it can be regulated, as well as the financial market: through legislation, from government regulators, derivatives exchanges and clearing organizations, self-regulating organizations.

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