## THE ROLE OF DERIVATIVES IN THE WORLD AND BELARUSIAN ECONOMY

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There is a clear trend toward financialization in today's global economy. The financial sector is becoming as important as the real economy, especially with the development of digital instruments and international capital flows. New financial instruments, especially derivatives, are emerging for the successful functioning of financial institutions. Derivatives are continuously linked to all financial instruments on the markets and are necessary, among other things, for the success of the real sector. These types of instruments make it possible to hedge risks, increase profitability, speculate on markets and also to buy real assets competently. The relevance of this issue is related to the growing role and real values of this sector. The object of the research is different types of derivatives and their use. The paper presents an analysis of the use of derivatives in the world economy, as well as in the economy of the Republic of Belarus.

*Key words:* derivatives, forward contracts, future contracts, options, credit default swaps, financial markets.

With the development of the global financial system and the transnationalisation of capital, the role of already traditional segments of the international financial market, such as the international money market and the international capital market, is becoming smaller in comparison to the international derivatives market. Derivatives are contracts about the future price of different types of underlying assets within a contract.

According to the type of an underlying asset they can be divided into 5 major categories:

- financial derivative securities contracts based on interest rates on shortterm and long-term bonds of the United States, the European Refion or even the bonds of the Republic of Belarus, as well as other countries;
- currency derivative securities contracts on the prices of global reserve currencies, as well as currencies, dominating in international trade for a specific country. This type of derivative is more relevant for the developing countries with the problem of currency instability;
- index derivative securities contracts on stock indices, such as the renown stock indices S&P 500, Nasdaq 100 or MICEX;

- derivatives on shares. Derivatives on the prices of stocks, of any joint-stock company, like for example EPAM or Apple;
- commodity derivative securities contracts on the prices for real goods, like energy resources, especially oil and gas, metals and agricultural products. [1].

At the end of 2021, the gross market value of the derivatives market is estimated at almost USD 13 trillion with a gross credit exposure of USD 2.7 trillion, while the nominal value of outstanding derivatives is around USD 610 trillion. All numbers declined in average for 20% after they had jumped noticeably in 2020 amidst heightened market uncertainty during the initial phases of the Covid-19 pandemic. The main elements of this market are contracts such as forwards, futures, options and swaps [3]. Their distribution by underlying asset is as follows: interest rate derivatives (75%), commodity contracts (11%), foreign exchange derivatives (10%) and credit SWAPs (4%). Thus, the volume of FX and interest rate derivatives market is about 9 trillion dollars today, which is comparable in size with money market. If we look at the derivatives market according to the currencies represented in the contracts, the largest role is played by the U.S. dollar with volumes of about 180 trillion and the euro with 150 trillion. It is noteworthy to mention that the Chinese yuan is not so actively represented in this market, yielding to the pound sterling and the Japanese yen. In turn, among the capital markets the US, Europe and Japan are also leading. Derivatives are issued by both financial and non-financial institutions. The most common are contracts for up to 1 year. In general, we can see that these financial instruments play a huge role in the global financial market, reaching incredible volumes. In the future, especially with the development of cryptoassets and the possibility of using derivatives for hedging and speculation, we can expect further growth in this area. Despite the fact that this segment of the financial sector is almost entirely represented by countries with developed financial systems, an assessment of the current state of this part of the financial market is important for determining the key directions of development.

The incipient stage of formation and development of the financial market of the Republic of Belarus with the lack of necessary legislation and institutions to regulate this sector is a prerequisite for the underdeveloped state of the derivatives market. However, due to the involvement in international trade and export-import operations derivatives are also important instruments alongside with volatility in foreign exchange segment and risk insurance in this area. Thus, derivatives market in Belarus firstly appeared in 1994 in the form of currency futures.

A feature of forward contracts is their over-the-counter nature, which allows the price of the underlying asset to be fixed. In the Republic of Belarus, the forward market can be represented only in two directions – exchange rate forwards and commodities. The commodity forward is relevant for Belarus in terms of trade in agricultural products. Such a contract allows producers in our country to fix prices for commodities, especially in a volatile world market and a shortage of producers' funds. As for currency forwards, in our country you can fix the exchange rate of the Belarusian ruble against the Russian ruble, the US dollar and the euro. These contracts are used for exporters and importers that sell goods paid for in foreign currencies in order to fix the proceeds and increase profitability. Belarusian banks are involved in providing these services: Priorbank, Paritetbank, and Bank BelVEB. The problem with the development of this contract is the terms of provision from the Belarusian banks: the fee for the contract itself and the margin, and the term up to 6 months. In practice, forwards make sense if they are concluded regularly and for long enough periods, and the hedging of risks is done for the enterprise rather than for the bank asking for the margin. In order to develop this line of business in Belarus, banks need to change their policy of entering into these transactions. A large number of these deals and economies of scale would allow banks to make money on these deals. However, this is not possible in a situation of severe devaluation, such as at the beginning of 2022. The total volume of forward transactions in Belarus is in the order of 100-300 million Belarusian rubles per month, falling in absolute numbers from 358 million in August of 2021 to 203 million in February 2022 [2]. In relation to exports, this amount is small, but in the long term the market volume could grow several times over.

A less common derivative in Belarus is the option. In general, it can be said that the option is not exactly an element of the financial market in Belarus and is not linked to underlying assets' prices as in other countries. The use of the option as a derivative is evident in the corporate direction. Under Decree 8, HTP companies can grant options to acquire an interest in a company. Virtually every HTP start-up and some international companies, such as EPAM, use options to attract employees. From April 2021, options can be used in all business entities in the Republic of Belarus. The difficulty in using this tool is that the stock market in the country is not sufficiently developed to evaluate companies and the securities options they offer.

Futures are agreements to buy or sell a primary instrument with deferred settlement. The underlying instrument may be a security or currency as well as raw materials or resources.

Considering the futures market section at the Belarusian Currency and Stock Exchange it is worth noticing that as of 2005, 47 members were registered in the futures market section, including 23 banks and 24 other professional market participants. According to 2019 data, only 28 legal entities are registered in this section which means that the number of participants has been seriously reduced

over the time. Turning to the volume of trading on the Belarusian Currency and Stock Exchange, we note that since 2010, trading volume gradually increased until 2014, amounting to 60 million Belarusian rubles. However, in 2015, the volume fell sharply to 16.6 million Belarusian rubles. Looking at the volume of transactions in contracts, the number of contracts gradually decreased over the whole period under consideration from 12,990 contracts in 2010 to 1,700 in 2015. Thus, the number of transactions on the Belarusian Currency and Stock Exchange has decreased 6 times from 2010 to 2015 [1].

Since 2015, there have been no transactions with futures contracts on the Belarusian Currency and Stock Exchange. The analysis shows that transactions with futures contracts were very few and were of a one-off rather than permanent nature. In other words, while this market is characterized by trillions of dollars in the world, it is extremely small in Belarus.

Talking about swaps there are cross-currency and credit-default swaps. Due to the current difficult geopolitical situation, the value of credit default swaps in Belarus increased significantly, experiencing a slight decline in early April and has remained at the same level until now. The most recent currency swap deal was concluded between the National Bank of Belarus and the People's Bank of China in 2015. The agreement provides for the parties to allocate funds in national currencies in the amount of 16 trillion Belarusian rubles and 7 billion yuan.

Looking at the derivatives market, we can conclude that it is as underdeveloped as the securities market. The main problems of the Belarusian derivatives market are the small number of participants, the terms of transactions and the lack of financial institutions. The market itself can be characterized as illiquid, unable to provide both the possibility to hedge risks and to speculate with these instruments. Ways to improve the derivatives market in Belarus include: establishing legal regulations, introducing the role of a central counterparty in the market and a liquidation netting instrument, and increasing transparency over transactions.

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