

**THE MINISTRY OF EDUCATION OF THE REPUBLIC OF AZERBAIJAN
AZERBAIJAN STATE UNIVERSITY OF ECONOMICS
INTERNATIONAL GRADUATE AND DOCTORATE CENTER**

MASTER DISSERTATION

ON THE TOPIC OF

**“ROLE OF DERIVATIVE FINANCIAL INSTRUMENTS AS A PROSPECT FOR THE
DEVELOPMENT OF THE AZERBAIJAN FINANCIAL MARKET”**

Vasif Mahmudov Suad

BAKU – 2019

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Head of the Center
Assoc. Prof., Dr. Ahmadov Fariz Saleh
signature _____
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Master:
Mahmudov Vasif Suad
_____ signature

Scientific Supervisor:
**Dr. of Econ. Sc., Prof. Ibrahimov Muslum
Azad**
_____ signature

Program manager:
Ph.D. Najafova Kamala Akif
_____ signature

Head of the Department:
Dr. of Econ. Sc. Kalbiyev Yashar Atakishi
_____ signature

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TÖRƏMƏ MALİYYƏ ALƏTLƏRİNİN AZƏRBAYCAN MALİYYƏ BAZARININ İNKİŞAF PERSPEKTİVİ KİMİ ROLU

Xülasə

Tədqiqatın aktuallığı: Dünya miqyasında törəmə maliyyə alətlərinin rolunu nəzərə alaraq, bu mövzünün Azərbaycanın maliyyə bazarına aid olması, hazırki derivativ bazarının tədqiqatına böyük əhəmiyyət kəsb edir.

Tədqiqatın məqsəd və vəzifələri: Tədqiqatın məqsədi derivativlər tərəfindən dünya maliyyə bazarının tarixi dəyişiklikləri başa düşmək, eyni zamanda bu dəyişiklikləri və perspektivləri Azərbaycan bazarında tətbiq etməkdir. Həmçinin, əsas məqsədlərdən biri maliyyə bazarında törəmə maliyyə alətlərinin rolunun və törəmə maliyyə alətlərinin göstərə biləcəyi təsirlərin Azərbaycanın maliyyə bazarının və onun cari vəziyyətinin təhlilinin aparılması, və proqnozun verilməsi idi.

İstifadə olunmuş tədqiqat metodları: Tədqiqat işində nəzəri metodlardan istifadə edərək, dünya maliyyə bazarının əsas tendensiyaları və inkişaf perspektivləri qeyd edilmişdir. Biz internet resurslarından istifadə edərək, xarici bazarların statistik göstəricilərinin müqayisəli təhlil yolu ilə nəticəni analiz və sintez edə bilərik.

Tədqiqatın informasiya bazası: Beynəlxalq Hesablaşmalar Bankının, Bakı Fond Birjasının, Avropa, Asiya və digər mühüm maliyyə bazarlarının statistik məlumatları

Tədqiqatın məhdudiyyətləri: Azərbaycanda törəmə maliyyə alətləri bazarının, əldə olan ədəbiyyatın və statistik məlumatlarının çatışmazlığı

Tədqiqatın nəticələri: Alınan nəticələrdən belə qərara gəlmək olar ki, həqiqətən, bəzi derivativlərin dəyərini qiymətləndirmək üçün müxtəlif riyazi modellər, o cümlədən mürəkkəb birilərindən, istifadə olunur, lakin törəmə maliyyə alətlərinin və onlar üzərində aparılan əməliyyatların əsas prinsiplərini anlamaq o qədər də çətin deyil.

Nəticələrin elmi-praktiki əhəmiyyəti: Aparılan araşdırmanın nəticəsində biz müasir maliyyə bazarının inkişaf perspektivlərini üzə çıxarıb, Azərbaycan bazarına tətbiqi və bilavasitə həmin bazarın inkişaf yollarının tapılması məqsədi gerçəkləşmişdi.

Açar sözlər: derivativlər, birjadankənar bazar, fyuçerslər, forvardlar , svoplar

ABBREVIATIONS

BIS	Bank for International Settlements
Bln.	Billions
CDS	Credit-Default Swaps
CFD	Contract for Difference
DFI	Derivative Financial Instruments
OTC	Over-The-Counter
Trln.	Trillions
USD	United States Dollars
WFE	World Federation of Exchanges

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INTRODUCTION

The actuality of the subject. The presence of money in the national economy leads to the formation of the financial system. Given that the main function of Finance is redistribution, the development of financial markets is the main condition for an effective redistribution mechanism.

Derivatives in recent years do not go from the forefront of international financial publications because of their direct relationship to the scandalous losses and the collapse of a number of organizations. And at the same time, this sector of exchange trading is developing daily, and its indicators are growing not in arithmetic, but in a geometric progression, which makes this topic of graduation work relevant today. Derivatives have been successfully traded for centuries, and the global daily turnover of derivative financial instruments reaches billions of US dollars. This fact makes many of the world traders to take part in the so-called “rat race” in order to grab their piece of the pie and become one step closer to their “American dream”.

Statement of problem and level of learning. Indeed, to assess the value of some derivatives used various, including complex mathematical models, but the basic principles of derivatives and operations with them, it is not so difficult to understand. Derivatives are constantly expanding their range of interest to various participants of the global financial market, including governments, financial directors of corporations, dealers and brokers, as well as individual investors.

Purpose and objectives of the study. The main objective of this research is to examine the impact of derivative financial instruments on international financial system and trade. To provide with the information about importance of derivatives in finance, in this case study the main focus will be on financial aspects of derivatives, like risks, volatility, liquidity of four main types of derivatives. Also, information upon current framework in the world has been presented and discussed.

The object & the subject of the dissertation are to enhance the knowledge of

individuals about derivative financial instruments and provide implications for international & Azerbaijan financial system & trade. At the same time, the subject is the examination of derivatives' impact on the trade and financial system. The main subject of this research is derivatives with their history, financial functionality, advantages & disadvantages, prospects for development of the market.

Research methods. Mainly qualitative methodology was used by analyzing existing literature and making a conclusion based on it. Below the ideas will be explored by using the comparative analysis of different literature and dynamics of derivatives from 2010 to 2017.

Information and empirical base of the research. The sources used are various books, informational bulletins, articles that were collected through internet-libraries, Google scholars, the newspapers, magazines and other public sources.

Limitations of research. The main limitation in the research process was insufficiency of the scientific literature in Azerbaijan on derivatives as a result of newly discovered industry.

The practical result and scientific application. The conclusion is that the derivatives have a significant impact on the international financial system and trade, which can make a modified trading system, financial sector, and daily usage much smarter and different than it is nowadays. It will ease the whole process, but the control and several weaknesses related to legislative nature, stability in prices and the complexity of derivatives market should be developed for a successful future.

Structure and volume. Thesis consists of list of contents, introduction, 3 chapters and 8 paragraphs in it, conclusions & recommendations, list of used literature. The structure of the following thesis is located in this way: Chapter 1 will discuss theoretical aspects of the formation and development of the derivatives market, which will provide information on the history of the derivative financial instruments, most significant derivatives, types & impact of derivatives. The Chapter 2 will discuss usage of derivatives in International Trade and its implication, where

information about the case of current usage of derivatives in the trade and finance, advantages and disadvantages of the derivatives in the trade and current statistics from around the world, future perspective of derivatives with its benefits and insufficiencies. Chapter 3 will present the regulation and future perspective of derivatives market in Azerbaijan, the analysis of current state and prospects of development. In conclusion there are shown all the recommendations and conclusions upon research topic.

CHAPTER I. THEORETICAL ASPECTS OF THE FORMATION AND DEVELOPMENT OF THE DERIVATIVES MARKET

1.1. The nature and characteristics of derivatives

So what is a derivative? This question, interesting for many years for so many economists from different parts of the globe, and became a “guiding star” on the way to the research of following topic.

In financial markets, derivatives include the following:

A derivative is a fixed-term contract, the relationship between the parties of which is reduced to the payment by one of the parties to the contract of the other difference between the price of the same asset fixed in the contract and the market price of the same asset at the time of settlement under the contract.

Derivative financial instruments emerged as a result of ongoing innovation in the securities market, which was associated with the expansion of investment of fictitious capital that does not function directly in the production process and is not loan capital, as well as in the process of transformation of financial relations (such as loan, credit). Thus, one thing is sure: the value of using derivative securities as a way to reduce risks. The growing importance of derivatives, as well as the risks associated with them, makes it necessary to consider the basic concepts associated with trading derivatives (the second name of derivatives). The emergence of derivative securities, or derivatives, is caused by the redistribution of price risks and their main economic functions related to the provision of hedging mechanisms to economic entities, i.e. co-insurance against changes in prices on the capital market and insurance of financial risks.

A sign of productivity is the fact that the price of securities is determined based on the prices of goods, currency or securities that make up their base (basis, underlying asset). The asset (security, currency, stock index, interest rate) underlying the fixed-term contract is called the basic. Since the price of a fixed-term contract depends on the price of the underlying asset, stock index, interest rate, a fixed-term

contract is also called a derivative instrument.

The underlying asset under this agreement may be:

- securities;
- goods;
- currency;
- interest rate;
- rate of inflation;
- official statistical information;
- physical, biological or chemical indicators of the environment;
- contracts that are derivative financial instruments;
- values calculated based on one or a combination of several of the above indicators, the price or terms of which are based on the relevant parameters of another financial instrument, which will be the base.

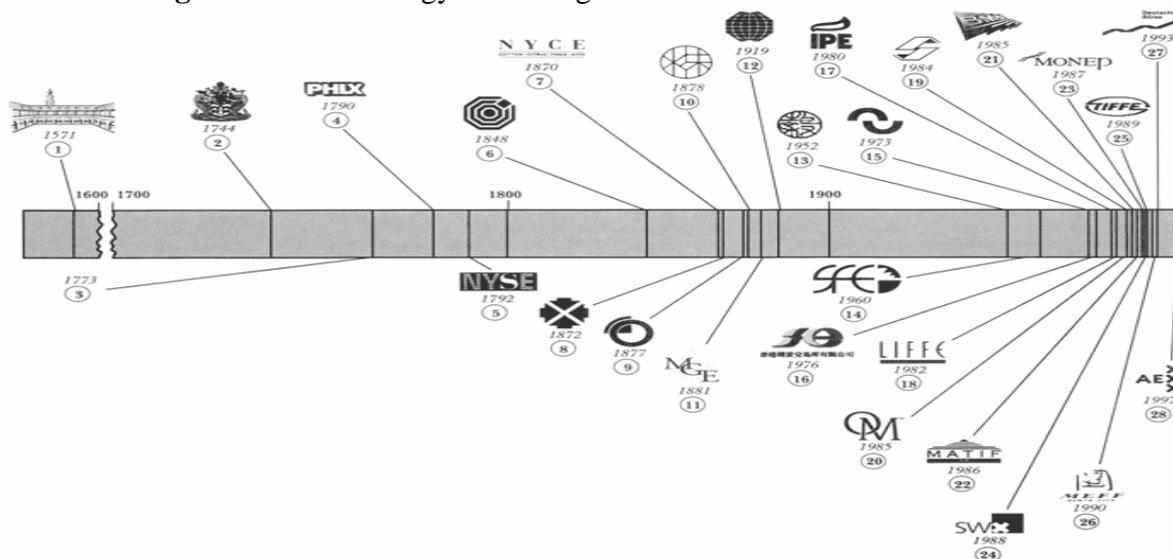
A derivative financial instrument may have more than one underlying asset.

The immediate reason for the emergence of derivatives was the increased mobility of foreign exchange rates, rates of traditional securities, interest rates on borrowed funds. In this regard, the most urgent task was to find protection against the risks of currency transactions, loans and new financial instruments.

New financial instruments in the form of derivative securities provided market participants with the opportunity to maneuver on a previously unknown scale. They allowed, regardless of the requirement put forward at the beginning of the operation or the obligation assumed, to operate separately with risks, liquidity assessments and to develop, predicts various options and investment results.

Figure 1.1 shows the chronological sequence of the emergence of different exchanges (commodity or financial), in the activities of which the derivatives played an important role.

Figure 1.1. Chronology of the largest derivatives markets in the world



Source: Деривативы. Курс для начинающих / Пер. с англ. — 2-е изд. — М.: Альпина Паблишерз, 2009. — 201 с.

Derivatives are significant for risk management because they allow separating and limiting them. Derivatives are used to carry risk elements and thus can serve a particular form of insurance.

The possibility of transferring risks entails for the parties to the contract need to identify all associated risks before the contract will be signed. Besides, we should not forget that derivatives are a derivative instrument, so the risks associated with trading them depend on what happens to the underlying asset. So, if the estimated price of the derivative is based on the cash price of the goods, which changes daily, the risks associated with this derivative will also change daily. Another in short, risks and positions require continuous monitoring as both profits, and the losses can be very significant.

A distinctive feature of derivatives is that the total number of liabilities upon them is not related to the total amount of the underlying asset traded on the market. Issuers of derivatives are not necessarily owners of the underlying asset. For example, the total number of contracts for difference in shares of a company may be several times more than the number of issued shares. Buyers and sellers of contracts for difference contracts are not initially focused on the supply of real shares; they are only

interested in the price difference that occurs on these shares for a specified period in the contract or under specified conditions.

The derivative has the following characteristics:

- Its value changes as the price of the underlying asset changes (interest rate, commodity or security price, exchange rate, price or rate index, credit rating or credit index, another variable);
- For its acquisition, instead of small initial costs compared to other instruments, the prices of which react in a similar way to changes in market conditions;
- Calculations on it are carried out in the future.

1.2. Types of derivatives

There are four main market instruments: forward contracts, futures contracts, options contracts, swap. Further each tool is considered in more detail.

A forward contract is an agreement between the parties on the future supply of the underlying asset, which is concluded outside the exchange. All terms of the transaction are stipulated at the time of conclusion of the contract. The contract shall be executed in accordance with these terms and conditions on the appointed date. That is, the forward contract is a contract for the future supply of the underlying asset, concluded on the OTC market. Considering the nature of the transaction, there is virtually no secondary market for forward contracts. During the conclusion of the transaction, all the terms and conditions under which the transaction is executed are stipulated. The peculiarity is that although a forward contract means an obligation of performance, the participants are not insured against non-performance, because bankruptcy or dishonesty of one of the participants are possible.

At the conclusion of the transaction, the counterparties agree on the delivery price. The delivery price is the price at which the transaction will be executed. It does not change during the contract. A forward contract can be concluded on an arbitrary date of the future, it is not limited to performance standards. As the basic asset of the forward can be anything, as contracts are concluded outside the exchange, so there is

no need to standardize the asset. To simplify the conclusion of transactions, convenient conditions are laid for the parties. The forward contract is binding, so this transaction is firm. A short position indicates that the person has given the obligation to deliver the asset. Long position – the person has committed to acquire the asset.

A futures contract is an agreement between the parties on the future supply of the underlying asset, which is concluded on the exchange. A futures contract is more standardized forward contract that can be cancelled by either party by paying monetary compensation for a transaction in the futures market.

The exchange makes decisions on standardization of these contracts for any underlying assets. Unlike a forward contract, where the risk of default falls on counterparties, the exchange guarantees the performance of the futures. Contracts must be registered with the clearing house. After this procedure, the clearing house is the seller for the buyer and the buyer for the seller. Standardization and performance assurance are the reasons for the high liquidity of futures. As the underlying asset of the futures can be both a commodity and a financial instrument. If the contract is based on a financial instrument, such a contract is called a financial future.

There are two types of futures contracts: supply and settlement. Deliverable futures allow delivery of the underlying asset on execution, while settlement futures do not allow delivery. At the conclusion of the contract is fixed price, which is called the futures price, indicates the expectation of investors regarding the future price of the asset based on the contract. This price can be above and below the current price of the asset. If the price is higher, it is said that there is a premium to the spot or contango price. If the price is lower, it is a discount to the spot price, i.e. backward. Basis is a difference between the price of spot and the futures price; it can be positive and negative. For commodity futures, basis generally is negative. For financial futures, the basis is calculated as the difference between the futures price and the spot price, so their basis is often positive.

For futures, as a rule, the exchange sets parameters; the standard parameters include the trading lot, i.e. the amount of the asset that is the basis of the contract; the delivery place for commodity futures, which is the delivery address of the goods, if the seller has not closed the position. In addition, the standard parameters include price quotation and price step. The price step is the minimum value of the price change per unit of the underlying asset, determined by the exchange itself and ensures the convergence of the prices of the seller and the buyer during trading. Also, such parameters as limit price changes per day, planned months of contract execution, the last trading day of position closing, the last day of delivery and the position limit are standardized. The main purpose of the conclusion of the two futures contracts: hedging and speculation.

Option - a contract between two investors, one of which writes out and sells an option, and the other buys it and is entitled to buy or sell the asset at a specified price to the seller of the option within the period specified in the contract. The seller of the option undertakes to execute it. The buyer cannot perform the contract at a price other than that specified in the contract. A fixed price is called a strike. Options can be classified by maturity. There are two types of contracts: American and European contracts. The American contract may be executed on any day before the due date, and the European contract shall be executed on the due date. Options can also be divided into call and put options. A call option is a sell option. Put – to buy. To buy a call or put option, the buyer must pay a premium, which consists of the internal cost and time. Internal – the difference between the current rate of the underlying asset and strike. Time value is the difference between the premium and the internal price. The closer the deadline, the smaller the temporary bonus.

Swap is a purchase and sale operation of the underlying asset, which is accompanied by the conclusion of a contract for the return sale of goods after a certain period under certain conditions. Transactions are concluded either through a Bank or through a trade organization, and an individual contract is drawn up.

Immediately after the conclusion of the contract there is a cash flow. Since this is a purely financial instrument, the supply of goods is not provided; in fact it is a contract for the exchange of funds at certain intervals. The term of the contract can be from six months to 15 years.

Swap fixes future prices for a certain period, so most often this type of financial instruments are used by hedgers and participants who want to fix the costs for a certain period in order to remain competitive. Swaps are also used by banks to place funds at high interest rates with liquid collateral. Also, banks use swap operations if the limit on the open currency position is exceeded, which is why it is impossible to conduct a spot transaction. Or use swap contracts as a guarantee for the return of currency at a set price that independent from the exchange rate. In addition, swaps are one of the Bank's asset management tools.

There are two main types of swaps: interest rate and currency. Currency – agreement on the exchange of funds in different currencies. An interest rate swap is a transaction between two parties in which they exchange interest payments on obligations of equal value but different interest rates.

In addition to interest rate and currency swaps, there are also swaps for securities, commodity and credit default swaps. Securities swap consists of two parts, one of which is cash flow tied to changes in stock prices or stock index, the second is cash payment tied to an interest rate, fixed or floating. Participants can make a payment at specified intervals; can also make one payment at the end of the contract. In the case of a commodity swap, one of the parties to the contract undertakes to buy the goods from the other at the price fixed at the time of signing the contract, while the other party undertakes to buy the goods from the first party at a floating price. If the fixed price is higher than the floating price, the difference is paid to the party that purchases the goods at the floating price, and vice versa. The credit default contract provides for the transfer of credit risk from one party to another. The seller assumes credit risk, which the buyer does not want to assume. In exchange, the buyer pays

protection fees. If a risk event occurs, the seller pays compensation to the buyer. Credit default swap is most often used for hedging and speculation. (Hull J., 2018, p.4-9)

Table 1.1 shows the differences between futures and forward contracts in such characteristics as the number of assets under the contract, the quality of the asset, delivery, delivery date, risk, liquidity, guarantee fee, regulation, the ability to obtain non-operating profit without closing the contract, the possibility of closing.

Table 1.1. Comparison of characteristics of futures and forward contracts

Contract specifications	Futures contract	Forward contract
1. The number of the asset under the contract	Set by the stock exchange. You can only trade an integer number of contracts	Varies depending on the needs of the buyer (seller)
2. Quality of assets	Determined by the stock specification	Varies depending on the specific needs of the consumer
3. Delivery	In the forms established by the exchange. Only a few percent of all contracts end in delivery	The underlying asset of the contract is delivered. Delivery is carried out under each contract
4. Delivery date	Delivery is allowed on the dates set by the exchange	Any by agreement of the parties
5. Liquidity	Depends on the stock exchange asset. As a rule, very high	Often limited. The market can only take place for one buyer
6. Risks	Minimal or absent under a futures contract registered by the exchange	There are all kinds of risks
7. Guarantee fee (margin)	Usually required	Usually missing
8. Regulation	Regulated by the exchange and relevant government agencies	Low regulation
9. Opportunity to get unrealized profit without closing the contract	There is	Absent
10. Possibility of closing	There is	Requires the consent of the second party

Source: Hull, J. ; Options futures and other derivatives, 2018, p.4-14

1.3. The impact of changes in the derivatives market on the financial market

The global derivatives market is a comprehensive market mechanism, which is based on globalization trends, the impact of supply and demand in the financial market, serves a system of transactions with derivative instruments in order to make a profit. Although derivatives are designed to provide securitization of transactions in

financial and commodity markets, they are currently used by economic agents for speculative operations and generating additional profits. This, unfortunately, does not lead to stability in the financial market, but rather, on the contrary, leads to its even greater instability and «contagion», the development of financial crises.

In addition, the economic importance of derivative financial instruments leads us to believe that it is the product of the activities of financial intermediaries, which, given the market situation, the laws of supply and demand, guided by the existing financial mechanisms for hedging risks, create tools with more acceptable and convenient consumer characteristics to meet the needs of the market. In this case, the underlying or other asset does not have the characteristics and advantages that the derivative has. For example, such attractive characteristics are more convenient conditions and terms of payment of income on financial obligations, issues of reducing transaction costs, and other significant terms of the contract. For example, the need for such instruments is currently dictated by instability in some financial markets around the world. In particular, it is felt in the growing markets, an example is the Chinese market.

In addition, for the global derivatives market – derivatives – we can identify several characteristics. We can directly connect these features with the position that this market occupies in the structure of financial markets. The belonging of any market mechanism must be viewed through the prism of its functional features. This will both reveal its purpose and determine the utility function of any market mechanism. Thus, any economic phenomenon, its impact and location in the General system of world economic relations can be considered only through the prism of functional features. Functional predetermination of any economic phenomenon plays a very important role not only for the financial market, but also for the economic development of the whole state. For example, some of authors note, the majority of creators see economics as a field of engineering, in which the plan and the market are interchangeable, and in fact they are interested in the opportunity to identify the

motivational, mechanical and institutional forces that determine the totality of economic results. At the same time, the depth of economic results directly depends on the functional characteristics of economic institutions.

The function is an external manifestation of the properties of an object in a given system of relations. Thus, the methodology and meaning of the term «derivatives market» should be considered from the perspective of the functional belonging of such a market structure. In addition, this refers to the functional characteristic of the market, not only because of its purpose, but also because of the nature of the relationship that is determined by the market.

In particular, one of the defining functional features of the derivatives market can be considered a general function of the development and growth of fictitious capital. The peculiarity of fictitious capital is due to the fact that it is not drawn directly in the production process; at the same time, this capital cannot be attributed to other special types of capital, such as loan capital. Financial instruments, called derivatives, simultaneously create fictitious capital and ensure its constant movement. Sources of fictitious capital can be a variety of subjects and markets, but the most important in such accumulation is the market of derivative financial instruments. The consequence of excessive accumulation of fictitious capital may be the emergence of financial crises. The self-growing role of financial crises is directly related to the emergence of a large number of fictitious capitals, which largely affects the emergence of crisis phenomena. However, the issues of instability in the financial market, as well as the problems of stabilization of the situation will be discussed below.

Another important functional feature of the derivatives market, its place in the market system is the financial risk management system. Modern understanding of the management of the risky component of investments involves the management of financial risks. Thus, modern economic theory involves the creation of a system of regulation of financial risks that can be accumulated using the tools of fictitious capital, which is generated in the derivatives market. In addition, such a system is

simply necessary in the current state of the financial markets, which is confirmed by the latest information about the adverse risks in the foreign exchange market – this is due to the possible exit of Greece from the Euro zone. It is the protection of the risks of underlying assets, which is the basis for the creation and functioning of derivative capital, which predetermined the increase in risk in their circulation. Currently, to prevent this risk, States are creating mechanisms to control the participants of the financial derivatives market, but this is not always enough, since the generating and chaotic functional feature of the financial market can often be beyond the control of the hedging mechanisms that exist today. Consequently, financial derivatives do not fully perform their primary functional feature of stabilizing the market.

An important functional feature of the derivatives market is the function of maintaining the balance of operations in the financial market. Thus, derivative financial instruments were initially aimed at arbitrage operations to ensure the liquidity of the financial market of primary instruments (in this case, primary instruments can be any financial market instruments that underlie the production of derivative instruments). In connection with this functional feature of derivative financial instruments was not directed just to maintain the liquidity of the whole financial market, but also on the creation of possible forms of competition emerging the opposite of commitment. It is in connection with this feature that most derivatives are presented to us in the form of special trading and settlement mechanisms.

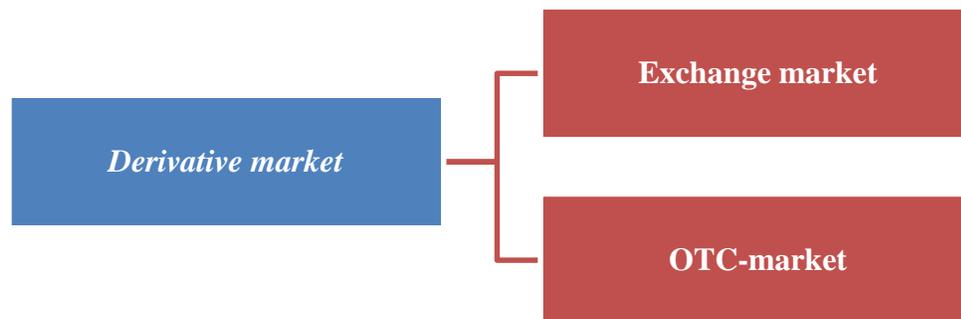
Thus, the derivatives market occupies an important place in the structure of the financial market, is very important in considering its functional features, the key of which are the preservation of the current level of liquidity and the organization of the hedging procedure. Currently, the derivatives market with the existing methods used in it can be considered not as an element of stabilization of the entire financial market, but rather as a set of tools that lead to «infectious» of most market mechanisms.

CHAPTER II. CURRENT STATE AND DEVELOPMENT TRENDS OF THE INTERNATIONAL DERIVATIVES MARKET

2.1. Structure of the modern global derivatives market

Derivatives' trading is conducted in two markets, which are significantly different from each other in the organization of trading: exchange and Over-The-Counter. Next, each market will be considered in more detail (see Fig. 2.1.).

Figure 2.1. The structure of the derivatives market



Source: Made by author upon the research from Lofton, T. Getting Started in Futures, 2019.

The stock market is a collection of all stock exchanges around the world. Stock exchange — is a scientific, information and technically organized securities market, having a certain place and time of trading and working on the basis of certain principles. The exchange is a secondary securities market where ownership rights are redistributed between the participants. A characteristic feature of this market is that the identity of the trade participants remain unknown, in addition, the instruments traded on it are standardized.

In turn, the Over-The-Counter market does not have certain trading locations. The instruments traded in this market are less standardized, and the set itself is wider than on the exchange, as the rules for obtaining a trade permit are softer. Futures and options contracts are traded on the exchange market and all other derivatives are traded over the counter. The OTC market is characterized by a high concentration of large transactions with a small number of participants. In addition, the size of transactions on the OTC market is much larger than on stock exchanges. It is important to note that the OTC segment significantly exceeds the size of the exchange

due to a number of objective reasons: the availability of easier access to it, the lack of strict regulation, the lack of listing. All of the above factors make this market attractive for investors.

The derivatives market has its own internal structure, which can be classified on various grounds. In the most General approach, the market can be divided into primary and secondary, exchange and over-the-counter. Note that the derivatives market has a structure similar to the securities market, but the futures market is for the instruments of this market both primary and secondary, while for securities the exchange market acts primarily as a secondary. This feature is essential for the characteristics of the derivatives market, because with such an organization, the possibility of expanding or narrowing its volume is almost limitless, which allows market participants to respond very flexibly to changes in the economic situation.

Note that OTC markets are not always unorganized. Thus, in some segments of the derivatives market transactions are concluded with the help of dealers, acting as organizers of trade, providing a certain level of liquidity.

One of the features of the derivatives market is the complete symmetry of the opportunities for both parties to conclude transactions in the sense of the need to own the subject of the transaction. Thus, if the presence of the seller's asset is a necessary condition for concluding a cash transaction, the underlying asset may not be at the disposal of any of the parties at the time of conclusion of the fixed-term transaction. Moreover, term transactions may be concluded on a non-existent, settlement asset. Therefore, one of the most important classification features of derivatives markets, adopted as the basis for the classification of derivatives by the Bank of International Settlements — the oldest international organization in the field of international monetary and financial cooperation, is the division of derivatives markets by type of underlying asset. Transactions can be commodity and financial. Financial derivatives markets are subdivided into underlying financial assets in the form of interest rates,

currencies and shares. In our opinion, the classification of a fixed-term transaction as a commodity market does not change its financial nature.

The fixed-term market can also be classified by the term of contracts for short -, medium - and long-term. According to its time structure, the market is mainly short- and medium-term, while the exchange market is almost only short-term: contracts concluded for more than a year are the exception rather than the rule.

For a better understanding of the nature and functioning of the derivatives market, it is necessary to consider specific classifications of derivatives transactions. In addition to the above distinctive features of futures markets, which are generally also inherent in market transactions, they can be classified by other factors.

In particular, according to the method of completion, it is possible to divide transactions into solid (delivery) transactions that end with the delivery of the underlying asset; settlement transactions — those that end with the transfer of funds as a result of changes in the price of the underlying asset; conditionally solid (conditional) transactions — involving the delivery of the underlying asset in the case of fulfillment (non-fulfillment) of certain conditions by the parties or one of the parties. An example of the latter is a contract that will result in the delivery of the asset if the position of the participant is not closed at the time of expiry (non-execution of an offset transaction). In accordance with this classification of transactions, the fixed-term market of firm obligations, the market of settlement transactions and the market of contingent liabilities are allocated. The trend of development of the organized derivatives market is the settlement nature of futures and forward contracts.

A hedge is a position that is used as a temporary substitute for a future position on another asset (liability) or to protect the value of an existing position on an asset (liability) until that position can be liquidated.

The process of forming a hedge is called hedging, the purpose of which is to transfer the risk to the counter party to the transaction. Most often, hedging is carried

out by means of instruments of the derivatives market, which are off-balance. However, it is possible to form a hedge using balance sheet instruments.

Currently, the leading exchanges of the world are combined into a consolidation for the exchange of experience and information about its segment, having as purpose, transparency, global stock market, and derivatives market including. One example, which you can specify as such consolidation is The World Federation of Exchanges, which includes 63 exchanges around the world and acts on behalf of the 99 companies, including partners and clearing houses.

Table 2.1. Comparison of exchange and OTC DFI markets on key indexes

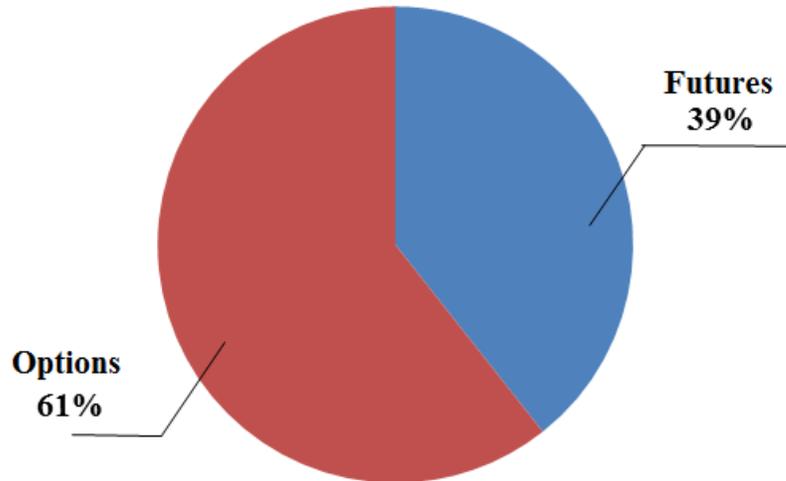
<i>Indexes</i>	<i>Exchange DFI market</i>	<i>OTC DFI market</i>
Market volume	63,312 trln. USD	492,911 trln. USD
Major form of contracts	Futures and options	Forwards, options and swaps
Operating market	Secondary market	Primary and secondary markets
Barriers for entering the market	Have to pass through listing procedures	No
Existence of single center of realization of operations	Yes	No

Source: Bank of International Settlements, <https://www.bis.org/statistics/derstats.htm?m=6%7C32%7C71>

The listing of members of The World Federation of Exchanges currently includes more than 48,000 companies, and the market capitalization of these entities is over \$70.2 trillion; around \$95 trillion in trading annually passes through the infrastructures WFE members safeguard. The statistical database has 45 years of information on 350 indicators.

On the exchange-traded market of derivative financial instruments mainly trading instruments are futures and options. As shown in Figure 2.2, options contract account for 61% of the total market volume, while futures accounted for 24,91 trln. USD.

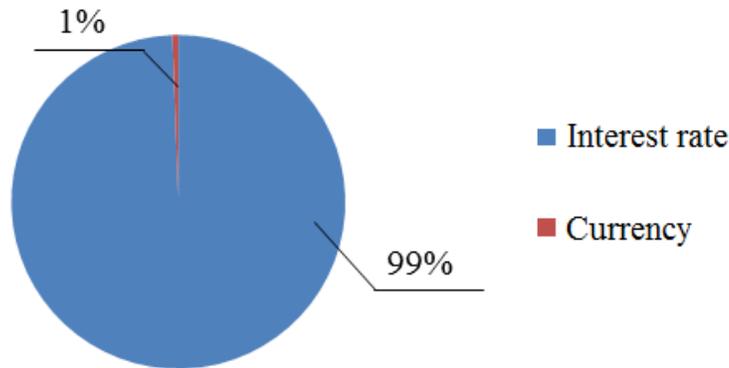
Figure 2.2.Exchange-traded DFI market structure



Source: Bank of International Settlements, <https://www.bis.org/statistics/derstats.htm?m=6%7C32%7C71>

According to the diagram in Fig. 2.3 the market is dominated by contracts, in the basis of which interest rates – 99% of the volume of all transactions.

Figure 2.3. The structure of the exchange market for derivatives on underlying assets

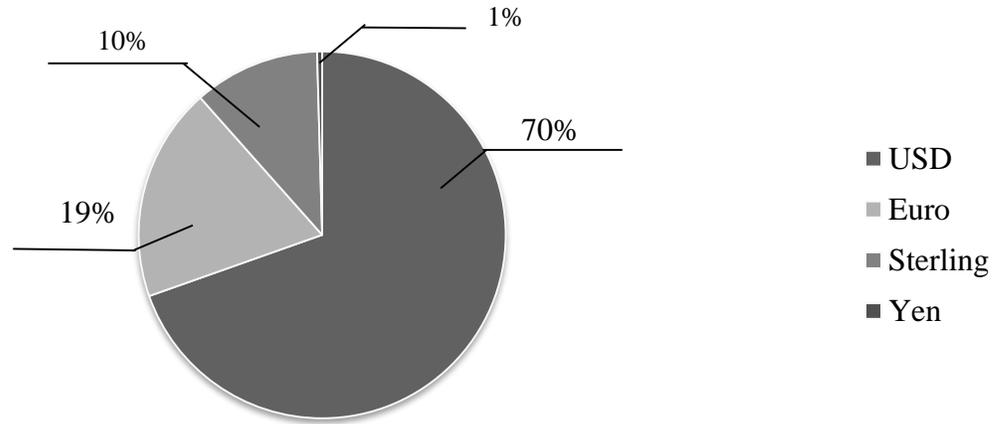


Source: Bank of International Settlements, <https://www.bis.org/statistics/derstats.htm?m=6%7C32%7C71>

70% of all exchange contracts are contracts that are executed in US dollars, 19% in Euros and about 11% in the British pound sterling (see Fig. 2.4).

The figure plays an important role in the process. Taking into consideration the fact, that the majority of financial operations all over the world are concealed in US dollars, we should assume & at the same time accept as the default the fact which was mentioned above.

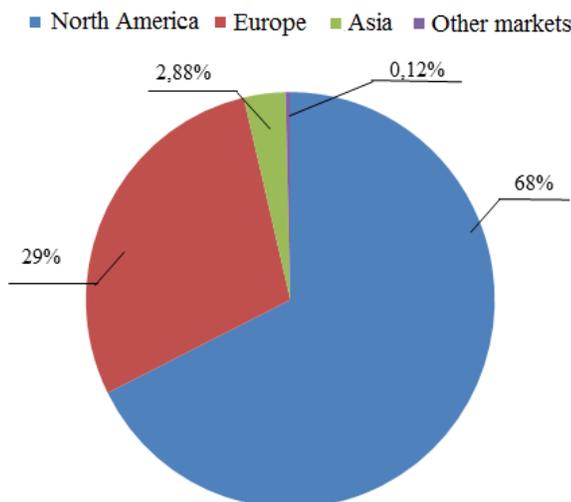
Figure 2.4. Structure of exchange-traded derivatives market on currency



Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

68% of all exchange derivatives are traded in North America, 29% in Europe, Asia and Oceania, because of the relatively low level of demand for circulation is the third in this list with an indicator of 3% (see Fig. 2.5). A table 2.2 shows the trading volume on the world's largest derivatives exchanges, as seen in the world, most of the trading are still in the North American region and in Europe. The Asian region, due to the increasing globalization process, is also actively involved in the process of exchange-traded derivatives.

Figure 2.5. Structure of average daily turnover of derivatives on the markets for the treatment of



Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

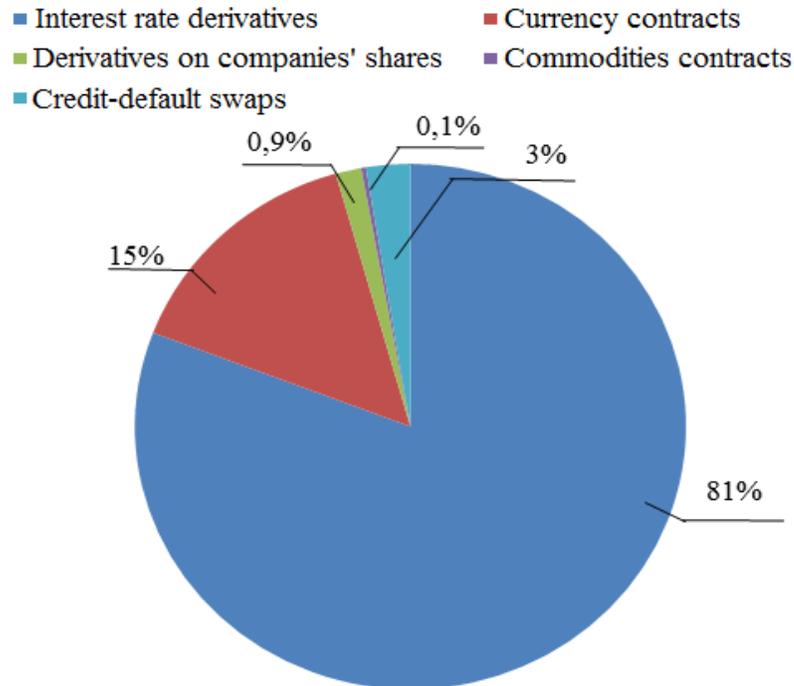
Table 2.2. Volume of trades on the biggest derivatives markets in 2015-2017, thousands of positions

Core assets	Trading Platform	Options			Futures		
		2015	2016	2017	2015	2016	2017
Currency	National Stock Exchange India	252 398	987 509	216 130	603 360	3 230 633	395 378
	CME Group (USA)	15 183	17 076	21 040	207 914	185 051	198 876
Interest rates	CME Group (USA)	285 916	364 943	388 155	1 201 665	1 401 434	1 311 884
	ASX SFE Derivatives Trading (Australia)	4 047	n/a	1 660	105 716	n/a	115 883
	EUREX	141 955	51 996	74 348	432 734	409 346	388 753
Price indexes	CBOE (Chicago, USA)	372 668	406 498	408 278	40 193	50 615	n/a
	CME Group (USA)	91 007	130 157	1 402 890	572 902	566 253	564 923
	National Stock Exchange India	930 054	1 057 086	1 893 555	101 750	105 430	165 587
	EUREX	13 764	51 996	401 388	327 431	409 347	429 805
Stock	BM&FBOVESPA (Brasil)	909 314	792 599	662 520	n/a	n/a	n/a
	NASDAQ OMX (USA)	688 537	695 283	584 043	n/a	n/a	n/a
	National Stock Exchange India	81 705	85 405	104 454	166 371	211 005	257 370
	EUREX	98 697	176 400	186 408	130 052	123 945	122 860
Commodities	CME Group (USA)	129 651	134 119	143 577	649 549	643 577	762 837
	Dalian Commodity Exchange (China)	n/a	n/a	n/a	700 501	769 637	1 116 323
	ICE Futures Europe	17 228	24 471	21 983	306 048	298 240	299 772

Source: Bank of International Settlements, https://www.bis.org/statistics/about_derivatives_stats.htm?m=6%7C32%7C639

In turn, as of December 2016, 81% of the OTC derivatives market was occupied by interest rate derivatives, 15% by currency derivatives, 3% by credit default swaps and 1% by contracts based on company shares (see Fig. 2.6).

Figure 2.6. OTC derivatives' market structure



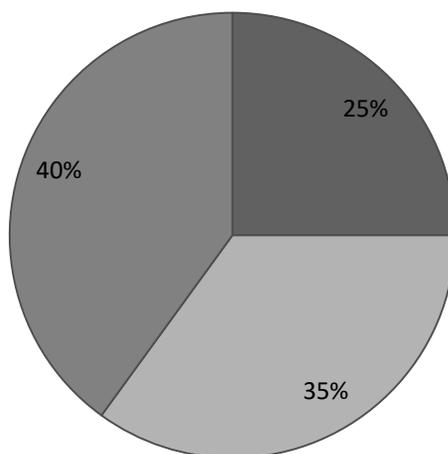
Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

Considering the OTC interest rate derivatives market (Fig. 2.7), it can be seen that at the end of 2016 the market was dominated by contracts with a maturity of one year or less, only 5% less were medium-term contracts and 25% of the market – contracts with a maturity of more than five years. Considering the fact, that this market is showing so many perspectives, but amount of the risks is rising, therefore the majority of players in the market currently are trying to make this market more standardized in order to cut all of the possible fluctuation risks. At the same time, by cutting the big part of risks, they are lowering their possible gaining.

The requirements are designed to prevent a series of defaults in case of default of one of the parties of its obligations – the debt will be repaid through security, explain the Central Bank of the Republic of Azerbaijan. Mandatory labeling of derivatives without the Financial Market Control Authority should reduce the vulnerability of the financial system and reduce the number of unsecured open positions in the market, the regulator hopes.

Figure 2.7. Ratio of types of OTC interest rate derivatives by maturity

■ 1 year or less ■ 1-5 years ■ more than 5 years

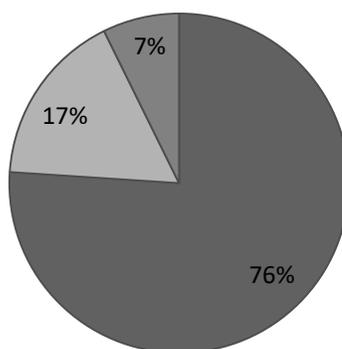


Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

In the OTC derivatives market, contracts with a maturity of less than one year, 16% for contracts with a maturity of 1-5 years and 7% for long-term contracts account for the majority of the market share (see Fig.2.8).

Figure 2.8. Ratio of types of OTC foreign exchange derivatives by maturity¹

■ 1 year or less ■ 1-5 years ■ more than 5 years

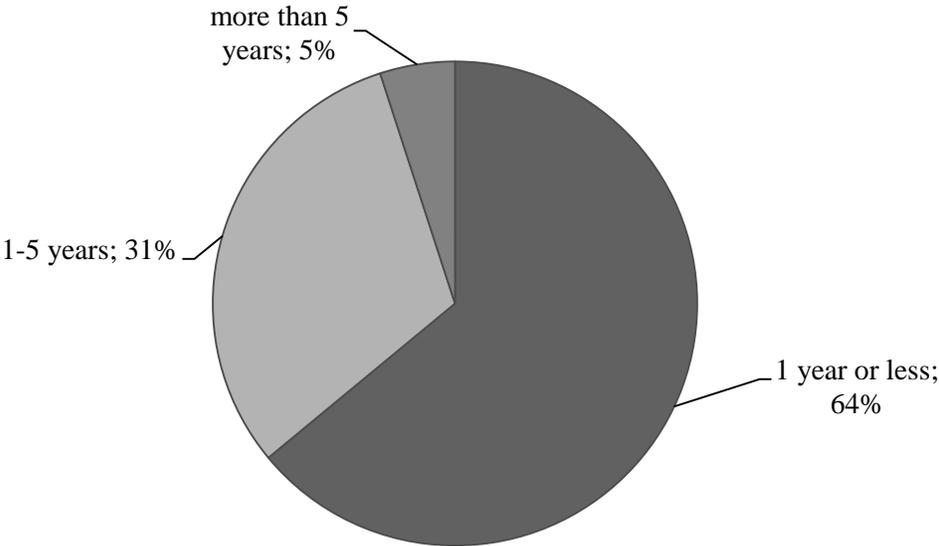


Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

A similar situation in the market of derivatives for shares of companies: 64% - short-term contracts, 31% - medium-term and 5% - long-term contracts (see Fig. 2.9).

Thus, the exchange market is much smaller in size than OTC, in addition, the market structures are different. In the OTC market, the range of traded instruments is wider due to the lack of strict regulation.

Figure 2.9. Ratio of types of Over-The-Counter derivatives on shares of companies by maturity



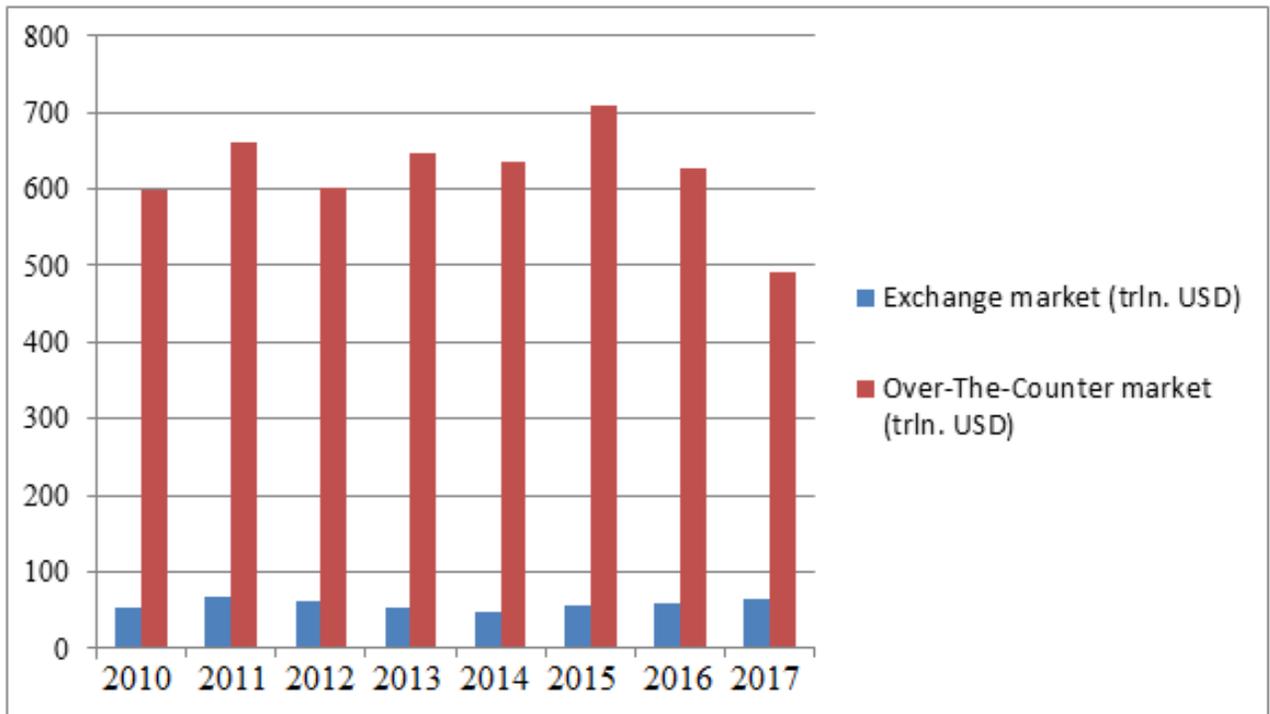
Source: Bank of International Settlements, https://www.bis.org/statistics/about_derivatives_stats.htm?m=6%7C32%7C639

2.2. Features and current state of the international derivatives market

As of 31.12.2017, the global derivatives market was 556, 222 trln. USD, including 446.975 trln. USD are accounted for contracts, the underlying asset of which is interest rates, 70,809 trln. USD under contracts with the underlying asset in the form of foreign currency, the volume of default swaps amounted to 12,294 trln. USD. For comparison – world GDP is 84,835.46 trln. USD. Compared to the same period in 2017, the total volume of transactions decreased by 129,628 trln. USD. Such kind of declines can be assumed after the changes of the mindset of acting counterparties, as they are interested to get less risk. Credit institutions report a nominal amount of outstanding OTC derivatives of more than €1,000 billion.

The figure 2.10 provides comparative information on the volume of transactions in the global derivatives market.

Figure 2.10. Global derivatives market volume (2011-2017), trln. USD.

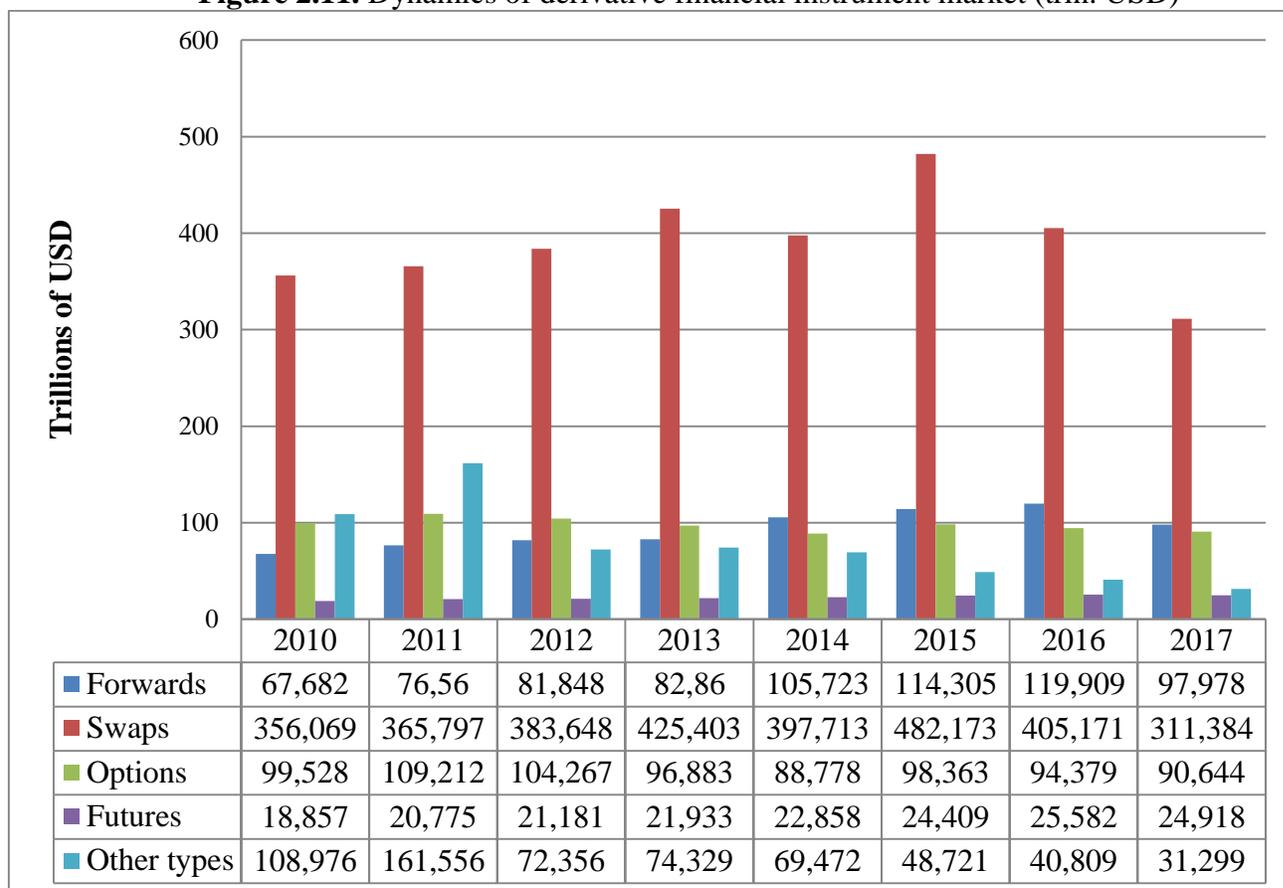


Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

According to the statistics of the Bank for International Settlements, forwards, swaps and options are the most common contracts on the derivatives market. In December 2017 the volume of transactions under these contracts amounted to 500 trln. USD. or 90% of the volume of all contracts in the world market. More contracts accounted for the swaps, which volume is 3-4 times higher than the volume of the markets of the remaining contracts (see Fig. 2.11). On the figure, we can witness the positive change in numbers in 2015, which can be aligned with the possible stability after fluctuation of oil prices, which absolutely shown its negativity in all of the markets, except for forward market.

OTC markets are generally divided into two key segments: the consumer market and the inter-dealer market. Customers almost exclusively trade through dealers due to high search and transaction costs. Dealers can also trade for themselves or act as market makers in the OTC market.

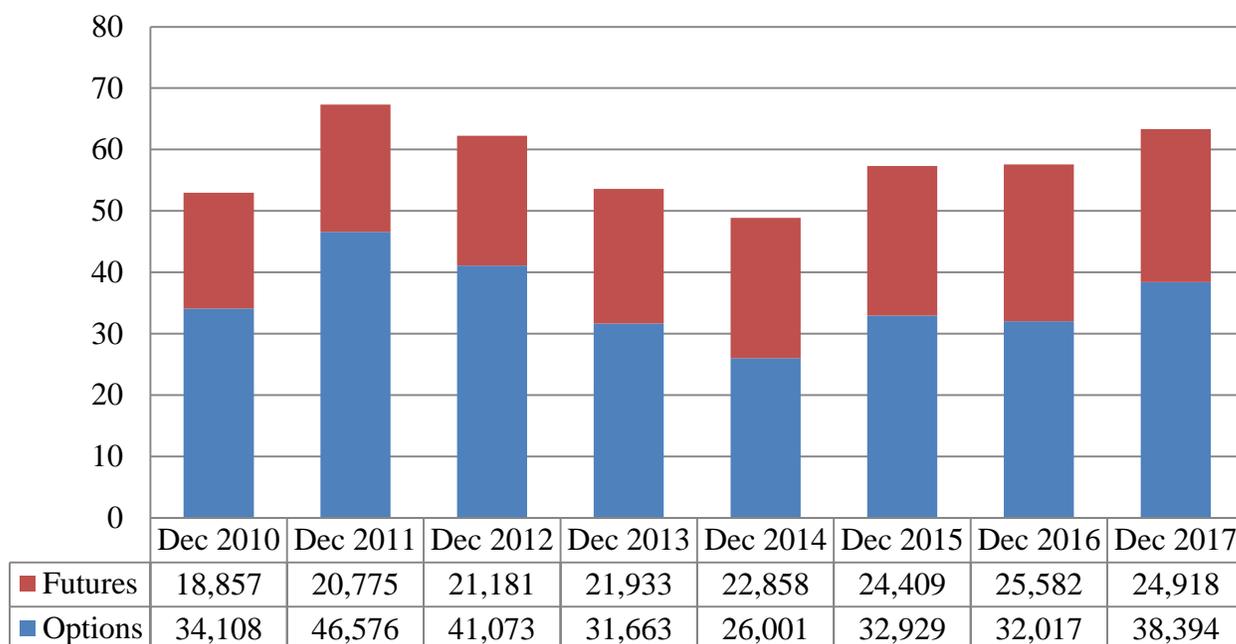
Figure 2.11. Dynamics of derivative financial instrument market (trln. USD)



Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

On Figure 2.12, there is the data on the number of transactions on the stock market of derivatives is presented. As it can be seen from the histogram in the period from 2010 to 2011, the number of transactions increased by 27,16 %, then to 2014 there was a tendency to reduce the volume of transactions, in 2015 the number of transactions increased by 17.35%. From the period of 2015 to 2016, the volume of the global exchange market of derivatives increased again. The largest fluctuation in the period under review was the stock options market, while the futures market remained, at least, more or less stable in the period from 2010 to 2011, after which there was a tendency to a unstable growth of the market until 2016; in 2017 the market fell by 2.6 %. During that time, major internationally active & interested in investment activities financial traders significantly increased the share of their earnings from derivatives activities.

Figure 2.12. Volume of global exchange derivatives market (trln. USD)



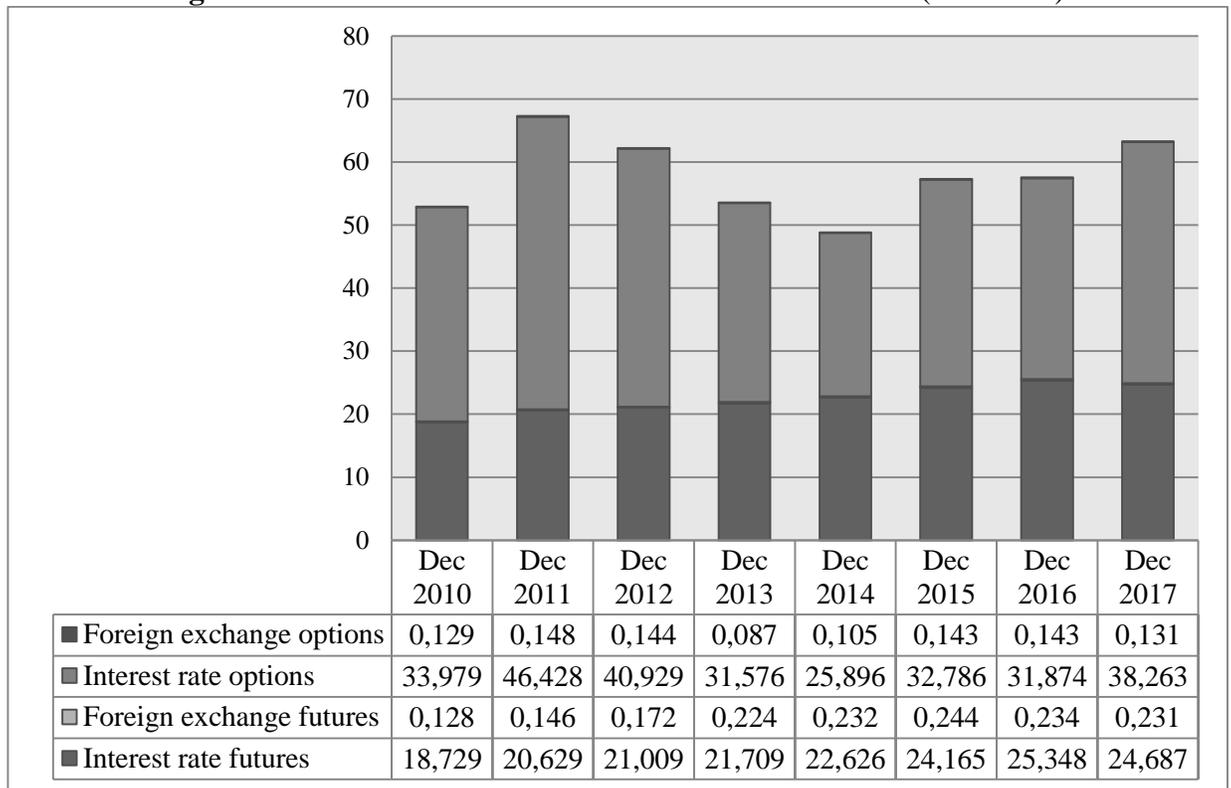
Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

If we consider (Fig. 2.13) the dynamics of the structure of exchange markets on the basis of basic contracts, it can be seen that the bulk of all transactions accounted for contracts, the underlying asset of which are interest rates, contracts, based on foreign currency, account for less than 2% of the total market volume. Interest rate options predominate in the market, in 2015 they accounted for 60% of the total market.

With currency contracts, the situation is somewhat different, futures prevail here, and they are about two times more than currency options. The market of interest rate futures for the last eight years has not been subject to sharp fluctuations, which cannot be said about the options market; in 2012 it reached its minimum for the period under review – 25, 895 trln. USD.

That is, all types of debt instruments are not regularly available for all borrowers. Thus, the interest rate swap market assists in tailoring financing to the type desired by a particular borrower. Both counterparties can benefit (as well as the swap dealer) through financing that is more suitable for their asset maturity structures.

Figure 2.13. Amount of stock trades on derivatives market (trln. USD)

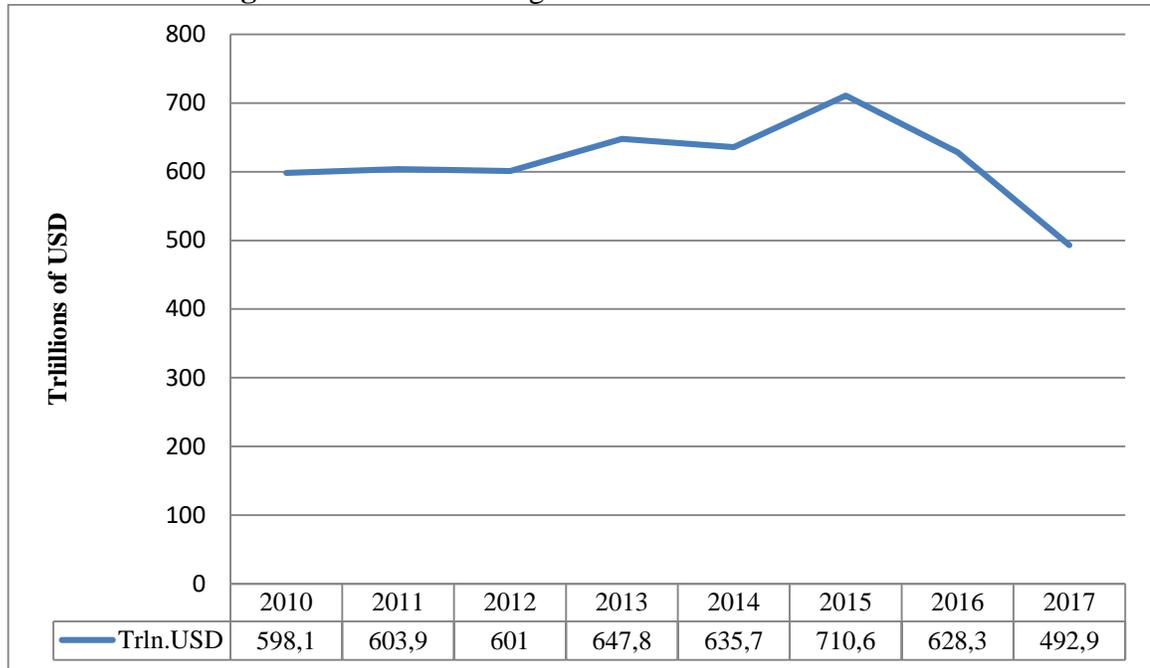


Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

The dynamics of the OTC market volume is shown in Fig. 2.14. As you can see from the chart, after the crisis, the market was stable for three years, its volume remained almost unchanged. Nevertheless, in 2011 there was a tendency to growth, which accelerated in early 2013, in December of which the volume reached pre-crisis levels – 710 trln. USD. Since 2014, there has been a rapid decline in the market, in 2015, the market indicators amounted to only 78.5% of the same period of previous year. Rapid decline can be aligned with the change of approach of market players, who are ready to lower their profit, but to gain at least more secure market platform.

A further, often ignored, risk in derivatives such as options is counterparty risk. In an option contract this risk is that the seller won't sell or buy the underlying asset as agreed. The risk can be minimized by using a financially strong intermediary able to make good on the trade, but in a major panic or crash the number of defaults can overwhelm even the strongest intermediaries.

Figure 2.14. Volume of global Over-The-Counter market



Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

According to Table 2.3 as in the derivatives exchange market, contracts with interest rates (69%), followed by foreign exchange (12.5%) and credit default swaps account for the bulk of the total volume in the OTC market.

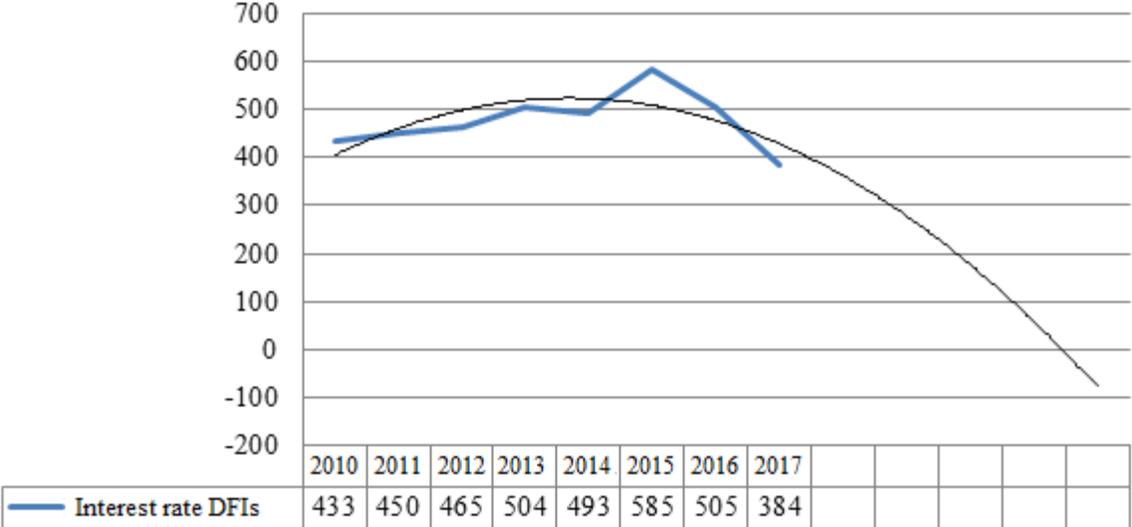
Table 2.3. Dynamics of OTC market based on underlying asset (December 2017), (trln.USD)

Underlying asset	2010	2011	2012	2013	2014	2015	2016	2017
Interest rate derivatives	432,657	449,875	465,26	504,117	492,605	584,799	505,431	384,025
Foreign exchange contracts	50,042	49,181	57,796	63,381	67,358	70,553	75,043	70,446
Derivatives on stocks of companies	6,471	5,937	5,635	5,982	6,251	6,56	6,968	7,141
Commodity derivatives	4,4	2,9	2,9	3,1	2,6	2,2	1,9	1,3
Credit-default swaps	41,883	32,693	29,898	28,626	25,068	21,02	16,399	12,294
Other	62,7	63,3	39,5	42,6	41,8	25,5	22,5	17,7

Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

Global OTC interest rate derivatives market. Figure 2.15 is showing the dynamics of the market volume of interest rate derivatives from 2010 to 2017, which in the period from 2010 to 2014 there was a moderate growth, in 2015 the market increased by 18% compared to the previous, after which in 2016 the market indicators returned to the indicators of 2014, then in 2017 the market declined by another 24%.

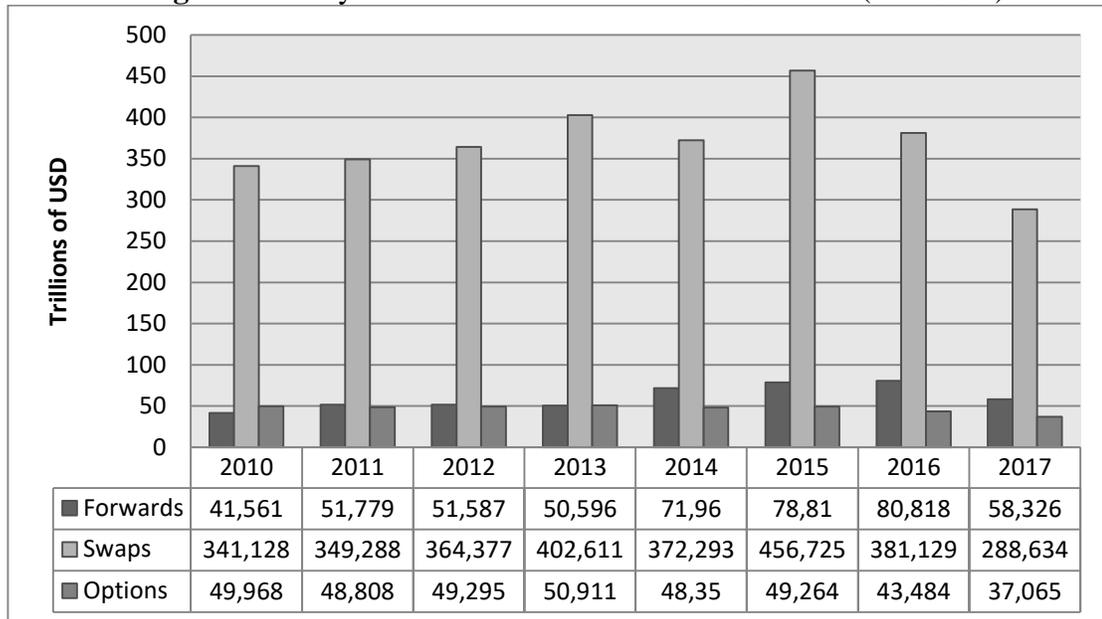
Figure 2.15. Dynamics of overall volume of interest rate derivatives. (trln. USD)



Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

Over-The-Counter interest rate derivatives market is represented mainly by three types of instruments: forwards, swaps and options (Fig. 2.16), and the volume of the swap market exceeds three times the total volume of the market of forwards and options. Until 2013, the ratio of forwards and options was the same, but then the market of forwards increased significantly, while the option decreased – for 2 years by 12 trln. USD. Over the previous 3 years mentioned in dynamics (2016- nowadays), we are facing with the fact of disruptive decline in the Over-The-Counter market with 14% in 2016 and with 34% in 2017 (in comparison with 2015), also the interest of traders in such an instruments is smoothly going down, which is bringing negativity in current market and can affect in the same manner in future possibilities.

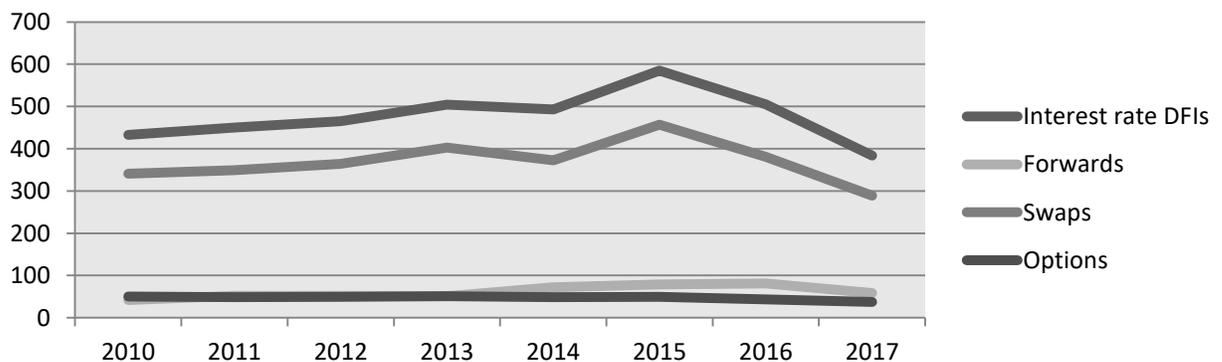
Figure 2.16. Dynamics of market share of OTC market (trln. USD)



Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

For figure 2.17, charts of the dynamics of the markets of each Over-The-Counter derivative financial instrument and the Over-The-Counter interest rate derivatives market as a whole are presented for comparison. As you can see, the market growth in 2013 and the subsequent decline in 2014-2015 are caused by changes in the swap market.

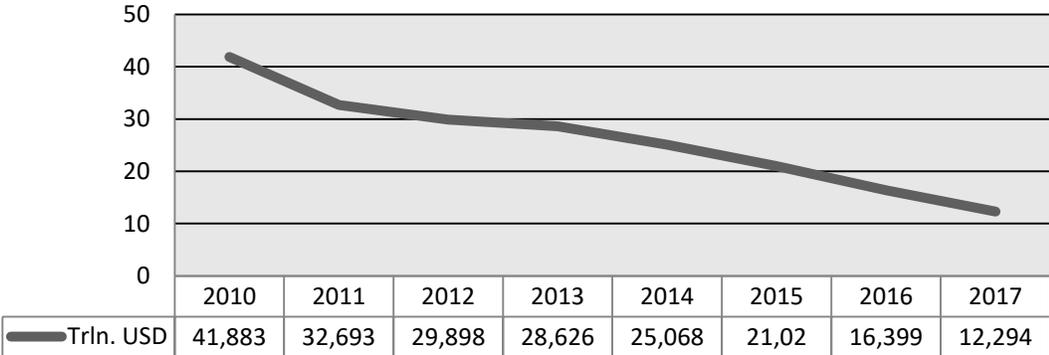
Figure 2.17. Comparison of dynamics on Over-The-Counter interest rate derivatives (trln.USD)



Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

Global credit default swap market. Figure 2.18 shows a plot of volume changes of the market of credit default swaps, which clearly tracked the declining trend in the market during the eight years of the study period the market for credit-default swaps decreased by 3.4% due to lower activity in the market of structural credit.

Figure 2.18. Volume of global market of CDS (trln. USD)



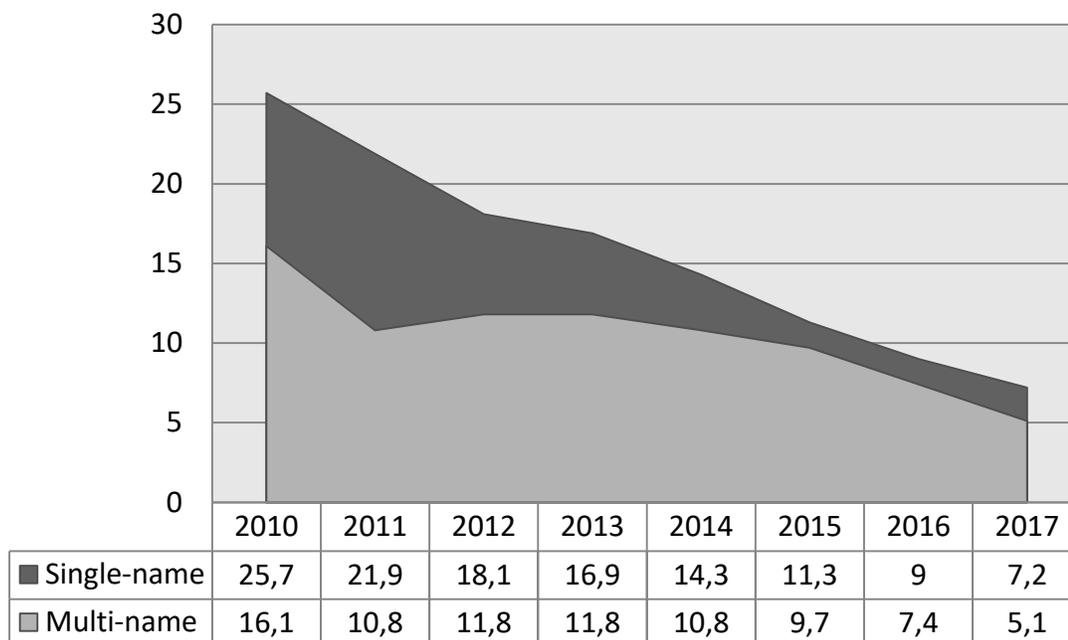
Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

The market is dominated by single-name credit default swaps, but their volume has been declining since 2010, while the multi-name credit default swap market remained relatively stable until 2015, when it fell by a trillion of USD. Now the size of the market of single-name credit default swaps is almost equal to the size of the multi-name market (see Fig. 2.19).

From the graph of the dynamics of the market for OTC derivatives, we can conclude that in contrast to the total market derivatives market foreign exchange instruments showed a tendency to increase since 2011 with a slight decrease in 2017.

A multi-name contract is associated with multiple credit events that trigger, if occur, a corrective payment to the protection buyer. Otherwise, the contract will remain active until it reaches the maturity date after which it expires. As described above, the establishment of a central exchange or clearing house for CDS trades would help to solve the "domino effect" problem, since it would mean that all trades faced a central counterparty guaranteed by a consortium of dealers.

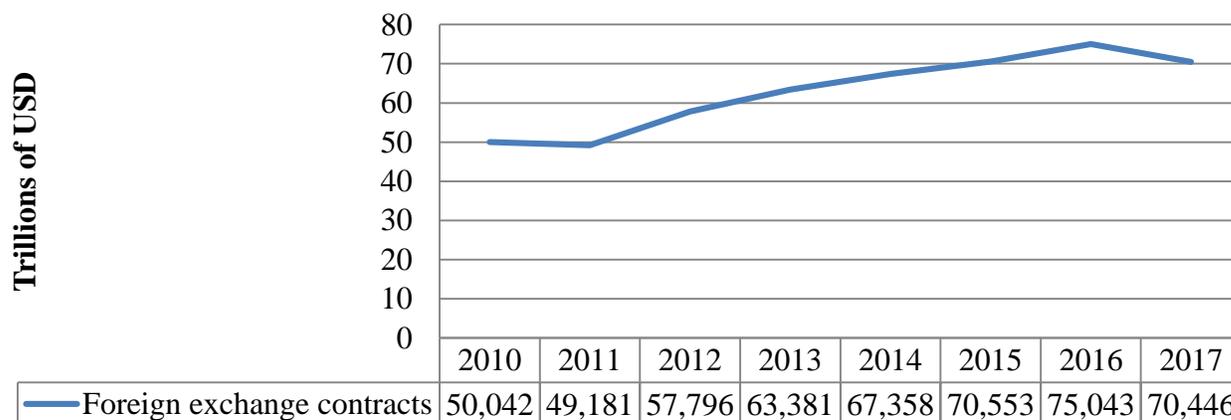
Figure 2.19. Dynamics of single & multi-name CDS (trln.USD)



Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

World market of currency derivatives. As it was described on the figure 2.20, it is possible to observe the chart of the OTC currency derivatives market dynamics. Since 2008, there has been a stable growth of the market until 2014, in 2015, the volume decreased slightly by 5 billion us dollars, returning to the indicators of 2013.

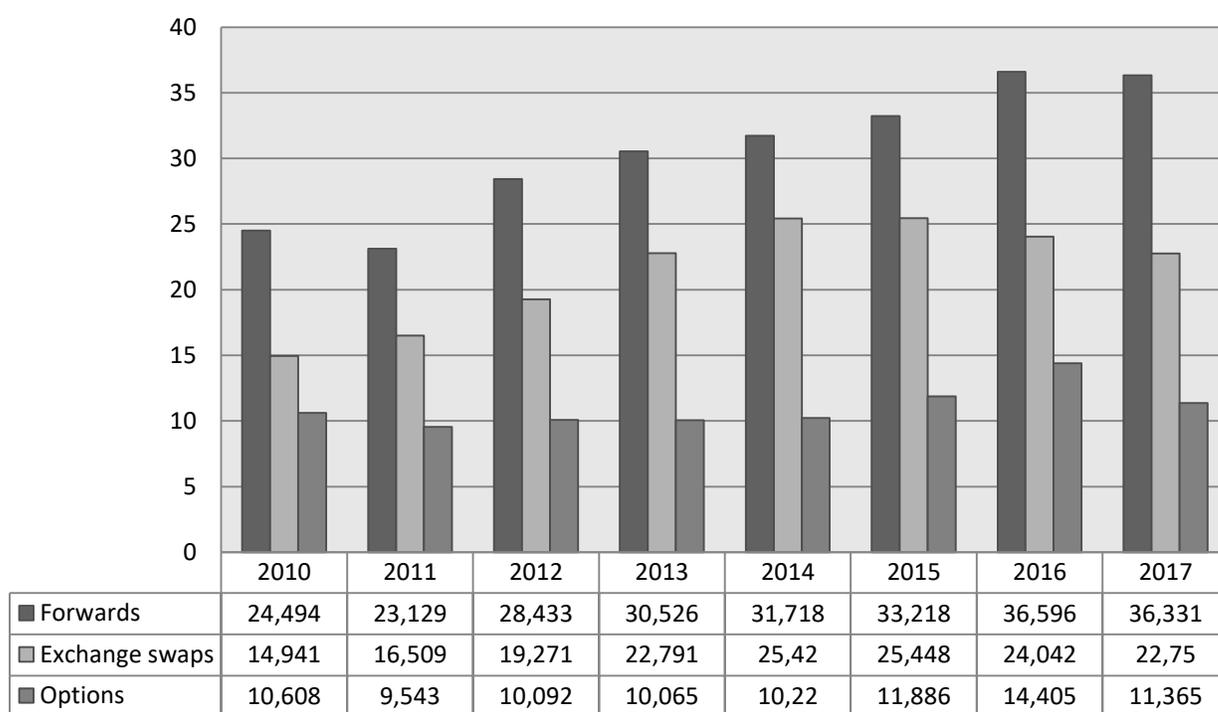
Figure 2.20. Dynamics of foreign exchange derivative financial instruments (trln. USD)



Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

Considering the dynamics of the structure of the market of foreign exchange derivatives, we can see that the growth in the General market was due to an increase in the volume of the forward segment. The market for these contracts slowed down its growth only in 2015. Currency swaps account for a slightly smaller volume of the market, which is currently \$ 12 billion less than the forward market. The smallest part is occupied by option contracts, the market size of which remained almost unchanged until 2013, when it grew by a billion USD.

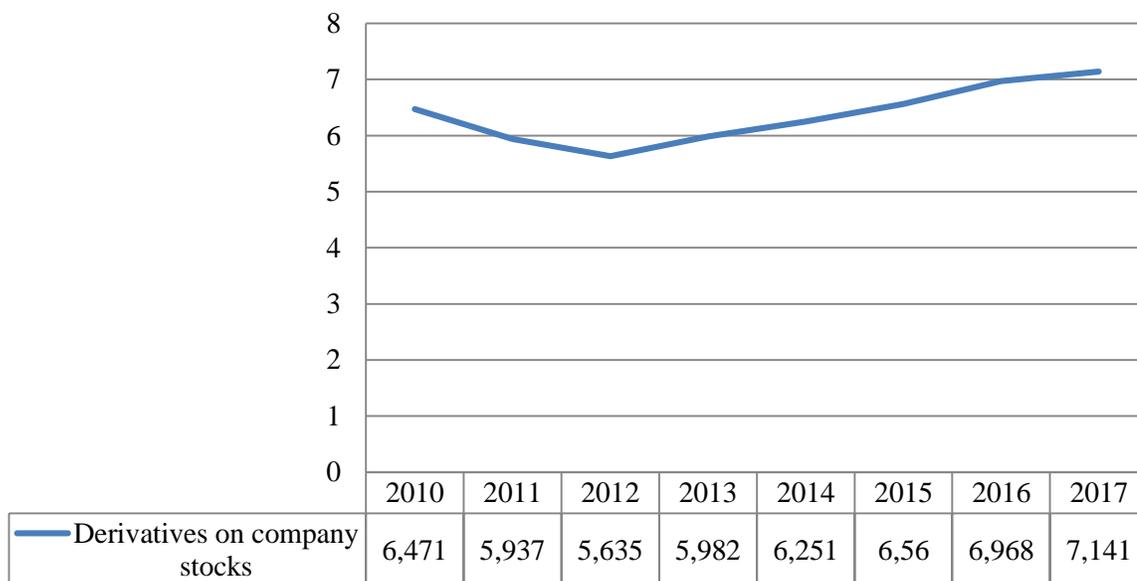
Figure 2.212. Dynamics of foreign exchange derivatives' structure (trln. USD)



Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

Derivatives on company shares. The situation in the market of derivatives on shares of companies is radically different from others. After the crisis of 2008, it decreased, but since 2013 the market has started to grow, and with the same speed as the previous years. Growth has slowed in recent years, but there has been no contraction. But this growth can not affect the market situation, as its volumes compared to the total Over-The-Counter market are very small (see Fig. 2.22).

Figure 2.22. Dynamics on the market of derivatives on company stocks (trln. USD)



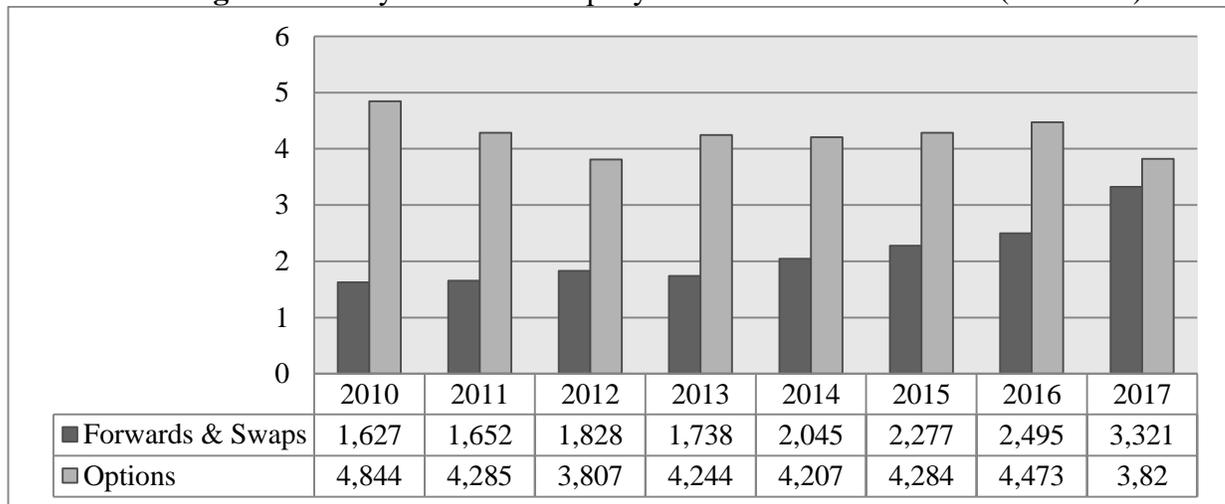
Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

On Figure 2.23 the dynamics of the market structure of derivatives on shares of companies are presented. This market is mainly represented by three types of instruments: forwards and swaps, options. Until 2016, this market was dominated by options, but the market of forwards and swaps developed and increased every year and in 2017 almost equaled the size of the option, which decreased by 0.7 billion us dollars. The swap market is small in size, so the Bank for International Settlements in its statistical bulletins brings the swap market together with the forward market. Considering the high level of possibilities, also day-by-day change in the business atmosphere all around the world, we definitely can assume that, in the nearest future forward & swap market will be dominating against the options market.

Equity options are the most common type of equity derivative. They provide the right, but not the obligation, to buy (call) or sell (put) a quantity of stock (1 contract = 100 shares of stock), at a set price (strike price), within a certain period of time (prior to the expiration date).

It can be used by investors to obtain the upside of equity-like returns while protecting the downside with regular bond-like coupons.

Figure 2.23. Dynamics on company stocks' derivatives market (trln. USD)

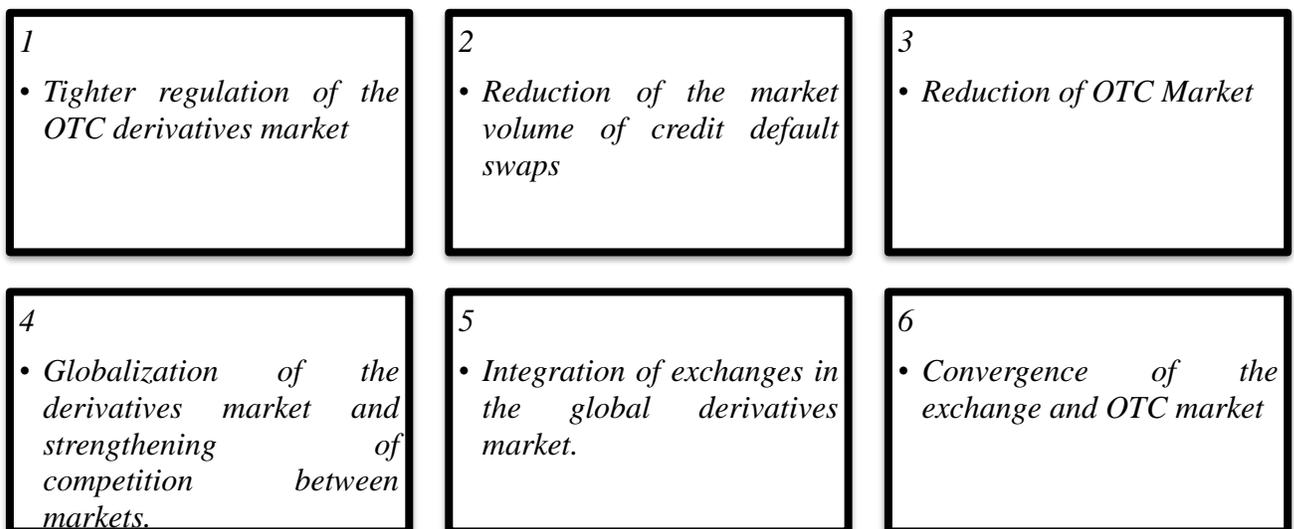


Source: Bank of International Settlements, <https://www.bis.org/statistics/extderiv.htm?m=6%7C32%7C616>

2.3. Problems and prospects of development of the international market of derivative financial instruments.

From the above, it can be concluded that in the market of derivative financial instruments at the moment we can identify six trends, which are presented in Fig. 2.24.

Figure 2.24. Current trends in the derivatives market



Source: Gottesman, A. An Introduction to Forwards, Futures, Options and Swaps Wiley Finance, 2016

Tighter regulation of the OTC derivatives market. After the crisis of 2008 at the G20 summit in order to reduce market risks in order to avoid the recurrence of such a situation, it was proposed to strengthen the regulation of the OTC derivatives market. In 2010, the Dodd-Frank Act was adopted for the US derivatives market, which established technical standards for Over-The-Counter trading. The main purpose of this law is to reduce the risks of the financial system. Thanks to this act, regulators receive powers over financial institutions and banks. New structures are being created, such as the financial Stability overnight Council, which identifies risks to us financial stability, Office of Financial Research, which collects market information for the Council, Consumer Financial Protection Bureau, monitors the implementation of consumer protection laws, Federal Insurance Office, monitors the us insurance system, and Office of Credit Ratings, controls rating agencies. In addition to the creation of new structural units, the act provides for a change in the rules of securitization of financial assets, under these rules, the risk that is sold to a third party should not exceed 5%, thanks to this innovation, organizations that previously aggressively took on the risk, now select borrowers more responsibly. Further, the acts took into account the interests of investors, introduced the «Volcker rule», but the most interesting in the context of this work are the changes in the derivatives. Thanks to this law, the regulation of the swap market and supervision of its participants is carried out by the Commodity Futures Trading Commission, and supervision of the securities swap market is delegated to the Securities and Exchange Commission. If a new tool is created, it must get the approval of these commissions before it hits the market. High regulatory rules are established for companies whose operations are mainly carried out in the derivatives market. The minimum amount of collateral that guarantees the fulfillment of obligations has been increased, the act obliges the agents to use clearing, and if it is possible to carry out transactions with derivatives through exchanges or electronic trading platforms. The Dodd-Frank law prohibits the provision of financial assistance to organizations that conduct transactions in the swap

market, and imposes restrictions on the number of transactions in the derivative market for Deposit organizations that are part of the Deposit insurance system.

The process of setting international standards is almost complete, but there are still issues of particular difficulty. The principle of risk management, as well as the principles of regulation of the counterparty, but there is no consensus what products are standardized enough for centralized clearing. Although the bulk of global principles governing reports on transactions were developed, work on the definition of standardized identifiers for counterparties and products to ensure consistency in treatment of similar transactions continues. Calculations for more than 50% of all transactions with interest-bearing assets and about 40% of transactions with credit are carried out centrally.

Some difficulty is the transfer of trading to electronic platforms, as it requires the creation of a large number of new rules. In addition, in some countries, the transition to electronic platforms is hampered by legislation, information exchange and reporting.

Reduction of the market volume of credit default swaps. The credit default swap in the mid-90s was a breakthrough in the financial world. The rapid growth of this market is due to several reasons, one of them, as mentioned above, is securitization, but there were others. In 2002, The International Association for Derivatives and Swaps (standardized credit default swaps), that is, gave them definitions, described the credit event, after which this market segment became popular with investment funds, insurance companies and hedge funds. And the third reason was the beginning of the process of deliberalization of regulation on the part of risk management, as credit default swaps allowed to take risks without freezing assets, and subsequently resell them. But after the 2007 boom, the credit default swap market began to shrink. Not the last role in this trend was played by the crisis of 2008, which «undermined the confidence» of market participants in structural lending. The decline in real estate

prices after the financial crisis is also related to the decrease in activity in the market of credit default swaps.

Reduction of the OTC derivatives market. Not only in the market of credit default swaps one can notice a decrease in activity, the market of OTC derivatives has been declining for the third year in a row. The reason is the decline in the market of interest rate derivatives, in particular interest rate swaps, as they make up a large part of the market, and the growth of the currency and derivatives market on the shares of companies could not affect the situation on the whole market.

The reasons for the reduction of the market include tighter regulation of the derivatives market, in particular the imposition of certain restrictions on organizations that conduct their operations in the swap market, including credit default (see trend № 1, Fig.2.24). As well as the transfer of some standardized contracts to stock exchanges, for example, interest rate options, the volume of which in the OTC segment decreased, but increased on the stock exchange. Related to this is another trend – the convergence of stock and Over-The-Counter derivatives markets. As a confirmation of this trend, we can cite several examples of standardized derivatives appearing on exchanges, which used to be traditionally traded only on the OTC derivatives market, the brightest of which is exchange swaps. On European stock exchanges are trading Swapnote or swap - a derivative financial instrument that allows you to access the market of interest rate Euro-swaps. This is a futures contract that is sensitive to the interest rate of the swap market. This tool reduces the risks inherent in swaps and also provides an opportunity to hedge open positions more effectively. In the US market there is a similar instrument – futures, the basis of which is the interest rate on ten-year swaps. It was created to hedge long-term risks.

The ongoing globalization of the derivatives market and the strengthening of competition between markets. The main financial centers are still New York and

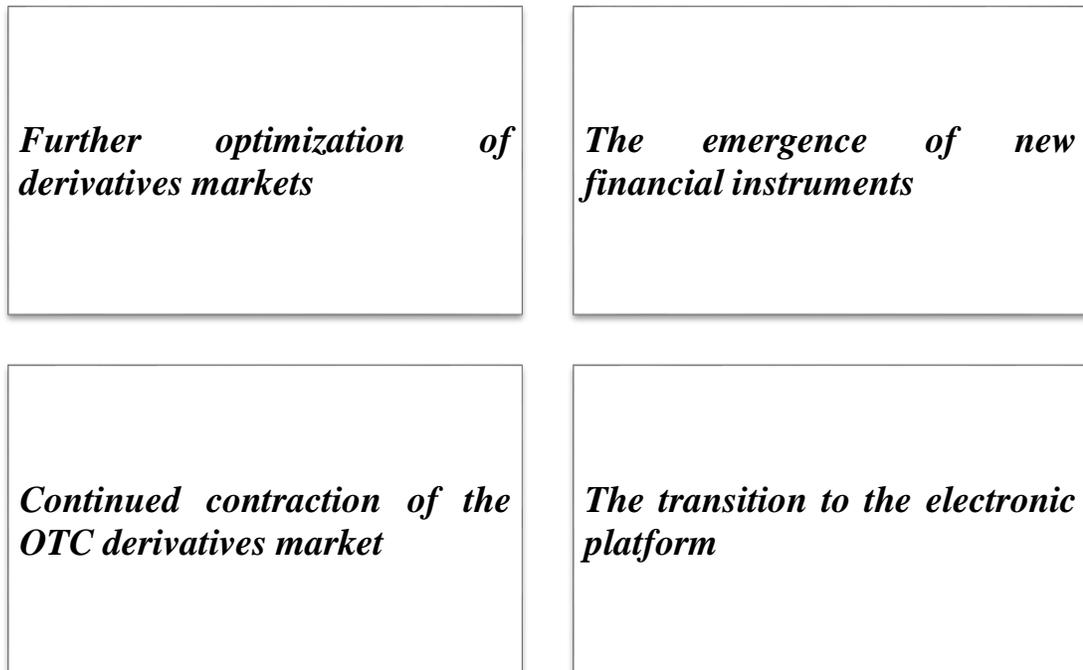
London, but recently other markets are developing, for example, activity in the Asian derivatives market has increased significantly. According to the World Federation of Exchanges, the Asian sector of exchange derivatives grew by 36% in 2015, a large part of the share falls on the Indian and Australian segments. Moreover, since the international rules for trading in the derivatives market have not yet been harmonized, there is fragmentation in the market, which leads to low market liquidity. In December 2015, 91.2% of all interest rate swaps in Europe were concluded between European market participants.

Integration of exchanges in the global derivatives market. Around the world, stock exchanges of countries with developed stock markets are United in associations or simply merged with other exchanges in order to share experience, statistics for a better understanding of the situation in the global financial market. But the main goal of integration is to reduce costs and increase competitiveness. It is possible to distinguish two types of integrations: vertical and horizontal. Vertical integration implies that integration takes place in close areas, for example, the creation of common clearing and settlement systems. Horizontal integration increases the range of services provided to market participants.

The creation of a highly liquid and sustainable derivatives market in Azerbaijan is a necessary condition not only for our country's participation in the process of globalization, but also for increasing its investment attractiveness.

Extrapolation of current trends suggests that in the medium term, the following trajectories of development of the global derivatives market are possible: further decline in market volumes, increased regulation and development of financial engineering products. So, Fig. 2.25 4 prospects of market development are presented. Of course, they are taking more subjective approach, but still after consideration of the tendencies mentioned above, we think, that these prospects can be the most positive in the current situation of the market.

Figure 2.25. Prospects for development of international derivative market



Source: Gottesman, A. An Introduction to Forwards, Futures, Options and Swaps Wiley Finance, 2016

Further optimization of derivatives markets. The process of reorganization of the OTC derivatives market has not yet been completed, some regulations are still being finalized, new standards are being developed. In the US, the futures trading Commission has normalized all derivatives transactions, thus completely reforming the derivatives market that is in its introduction.

But the market, regulated by the Securities and Exchange Commission, is not yet ready; measures have been implemented on it recently. In Europe, the process is slower than in the US, as the reorganization of the market is a labor-intensive process, and it is complicated by its and the fact that the need for coordination of regulatory authorities of the countries of the European Union.

The transition to the electronic platform. Currently, the transition process is difficult in many countries, either because of legal obstacles or because the transition requires compliance with a huge number of rules, which makes it difficult to make the transition quickly. The lack of international standards for some derivatives also makes

the transition difficult. But work in this direction is being carried out, albeit slowly, so that in the near future we can expect the transition of most OTC transactions to electronic platforms, which will increase transparency in this market segment. The transfer of trading to electronic platforms will also help to avoid further fragmentation of the market, thereby increasing the liquidity of the market.

Continued contraction of the OTC derivatives market. In two years, the market of interest rate derivatives decreased by 200 trillion, the interest rate swap market shrank the most. As well as the market of credit default swaps. And will continue to decline. The reasons may be the desire of the market to reduce uncertainty in the Over-The-Counter market, and thus to transfer trading to the exchange if possible.

The emergence of new financial instruments. It seems logical that the market will adapt to the changes that continuously occur on it, developing new financial products. There are exotic derivatives, some for new underlying assets, for example, in 2014, the first derivatives for cryptocurrency BitCoin appeared, and some instruments are a hybrid of existing products: in 2012, the Chicago Mercantile Exchange launched a new derivative futures for interest rate swap, which guarantees the supply of interest rate swap.

The main reason for the global economic crisis in 2007 and the subsequent recession in the economies of most countries was the inflated "bubble" on the market of derivatives in the United States. In the event of a series of non-payments and refusals to execute contracts, derivatives gave rise to a Domino effect: the collapse of one instrument led to the fall of others. Following this, the development of the crisis in the Eurozone has pushed the speculative nature of credit default swaps issued on the debt of the Greek government, which significantly increased the manifestation of the crisis in the global financial system.

In the emergence of the crisis, derivatives played the role of a trigger mechanism, which is due to the peculiarities of the circulation of this financial instrument. At its core derivatives must provide market participants the tools and

infrastructure to reduce the total amount of risk through its redistributed division. In other words, the derivatives market should theoretically serve as an additional support or insurance for business related to the real movement of goods or capital.

In practice, in the last decade there has been a huge gap between speculative players in this market and companies that are actually hedging the risks of their core activities. This is reflected in the fact that derivatives, in fact, began to be treated independently of the movement of goods lying in their underlying asset. As a result, their turnover has moved beyond national economies, as these instruments are no longer involved in the formation of the domestic capital of the countries where the underlying assets are produced.

Briefly, all threats to the development of the derivatives market for the global financial system can be formulated as follows:

- the market has become too big and does not stop in its growth;
- derivatives as financial instruments are not provided with anything;
- the system of derivatives circulation is almost completely out of control;
- this system is dominated by the largest banks in the world;
- uncontrolled (unregistered) and non - transparent issuance of new forms of derivative financial instruments is constantly taking place;
- the derivatives market is developing in isolation from the real economy.

Problems of regulation of the derivatives market

Due to the presence of a pronounced upward trend in derivatives due to the increase in the number of participants and the volume of attracted capital, the derivatives market needs urgent regulation. According to experts, measures to regulate the derivatives market can be developed in two directions: first, through the tightening of the legislation of the main countries — participants of the derivatives market; secondly, in the absence of a positive effect of measures to regulate the derivatives market, it is proposed to reset the market through the rejection of the main currencies that provide calculations for derivative transactions.

In September 2013, at the G20 Summit in St. Petersburg, the G20 countries agreed to tighten the rules of regulation of the derivatives market. The Declaration of the G20 summit pointed to the need to establish common minimum margin requirements for derivatives trading and to establish a system of centralized clearing of transactions with derivatives on the basis of international consensus. On the recommendations of the G20 regulatory financial market needs to ensure that trade high risk assets was carried out strictly under the mediation of the clearing centers and stock exchanges.

It is becoming clear that international regulation should be aimed at limiting the issue of derivative financial instruments. It should be borne in mind that a direct ban on derivatives as a financial instrument is unlikely to have a positive effect, since the vast majority of these instruments are traded on the OTC market. In this regard, it is the over - the-counter turnover of derivatives, especially interbank swap transactions, which should be subject to regulation. This involves the transfer of all transactions in the exchange system of circulation; trade these instruments only on the stock exchanges. This approach will eliminate the problem of conflicts of interest among participants of derivatives turnover, when the same bidder in one person acts as an Issuer, seller and buyer. First of all, this should apply to the relationship between banks and their clients, making transactions with derivatives, which should be carried out only with the participation of a third independent party — the exchange or clearing price, providing guarantees of performance of obligations by all participants in this operation.

The latest financial crisis has revealed the need for strict antitrust regulation of the activities of derivatives market participants, which is primarily due to the need to eliminate the dependence of a significant share of global financial flows on the management of global American banks. Thus, during the last financial crisis after the collapse of the Bank Lehman Brothers only default swaps CDS left debts of \$ 400 billion. The lack of control of global financial holdings allows them to ignore all the

principles of risk management and continue to issue new highly speculative instruments on the market, which not only do not provide a reduction in financial risks, but also contribute to their growth by including an unlimited number of new participants in these operations.

Consequently, the main problems of the modern derivatives market are the liberalization of the conditions of operations, as well as the uncontrolled activity of global financial institutions in this market, which are the main suppliers for the stock market of credit default swaps. This segment operates only in the OTC market, which is based on non-transparent pricing and inefficient monitoring of risks, including the risks of solvency of sellers of credit protection under CDS. However, other sectors of the derivatives market operating within the framework of exchange trading (options, futures, etc.) are more resistant to the crisis, as they operate under standard contracts and constant control by the exchange.

In addition, banks' risks under CDS are increasing due to the lack of a unified method of accounting for derivatives on the balance sheets of credit institutions. Currently, banks are able to due to tricks in the accounting of derivatives do not fully reflect the risks and possible losses associated with their treatment. To date, this aspect is most in need of regulation. In this regard, the issue of mandatory introduction of uniform standard rules for accounting for credit default swaps as a necessary condition for improving the turnover of derivatives by banks is acutely raised. In this regard, it is necessary to adopt a decision at the state level to ban transactions with OTC derivatives for commercial banks, which should eliminate most of the risks associated with the circulation of these financial instruments.

From the point of view of improving the turnover of derivatives, there are two fundamental points. First, there was a need to establish a Central Depository for the purpose of accounting for derivative financial instruments, which could greatly facilitate and streamline operations with all types of such instruments. Secondly, the role of self-regulatory organizations in the derivatives market should be increased,

which could take on such issues as interaction with state regulatory bodies, resolution of disputes between market participants, etc. There is already some experience in the world in terms of self-regulation of international securities circulation, when the Association of international stock market participants (ISMA) takes responsibility for the formation of conditions and control over the circulation of international securities and the activities of market participants.

Thus, minimizing the threat of the collapse of the global financial system lies in the creation of a system of regulation and control of the global market - derivatives, which in modern conditions has prospects for implementation with the joint participation of governments of countries whose banks are active consumers of derivatives.

CHAPTER III. MARKET OF DERIVATIVE FINANCIAL INSTRUMENTS IN THE SYSTEM OF FINANCIAL MARKET OF AZERBAIJAN

3.1. The role of the derivatives market in the development of the securities market of Azerbaijan

One of the ways of insurance against risks of economic entities in the country is the development of derivative market of financial instruments. The development of the securities market in Azerbaijan was mainly associated with the privatization of state property. Thus, in the process of privatization, privatization cheques and privatization options, which are securities, were issued, and medium and large enterprises were privatized through transformation into open joint-stock companies. The number of enterprises transformed on the basis of state-owned into joint-stock companies for the period from 1996 to 2013 is equal to 1599 units, which is the main part of joint-stock companies established in the country. Some of these joint-stock companies, about around 60.4 %, were created in the framework of the privatization program from 1995 to 1998. Creation of joint stock companies in the country revealed the need in development of infrastructure of the securities market.

Thus, in the process of privatization, the infrastructure was formed to ensure the accounting and turnover of shares and adopted legislative acts that regulate this process. Also, the country has formed an unorganized market of shares and privatization checks. The formation of the securities market was the impetus for the creation of the structure regulating this industry. The State Securities Committee under the President of the Republic of Azerbaijan was established on December 30, 1998 by the decree of the President of the country. To date, Azerbaijan has created a legal framework regulating the securities market, which is constantly being improved.

In Azerbaijan, despite the existence of futures trading rules, the subsidiary (derivative) securities market is not developed. Futures – a standardized exchange agreement for the purchase and sale of a certain underlying asset at a certain time at a predetermined price. Another type of derivative securities is an option contract, which

gives its owner the right to buy and sell the underlying asset at a certain time at a predetermined price. A warrant, having the properties of an option, in contrast, gives its owner the right to buy and sell the underlying asset at a predetermined price for a certain period.

Ensuring the development of securities in the country requires the formation of a number of necessary conditions. One of the conditions is the formation of the necessary infrastructure of the securities market in the country. Thus, the infrastructure of the securities market is associated with the presence of two groups of participants. The first of them includes the structures that ensure the movement of securities, the second – directly those structures that conduct transactions with securities. In recent years, important steps have been taken towards the formation of the securities market infrastructure in Azerbaijan.

According to article 1078-15.6 of the Civil Code the placement of shares of joint stock companies by the method of mass offering is carried out through the stock exchange. Despite the fact that this article was adopted for the development of the stock exchange, it contradicts the activities of such structures and the principles of issuing shares by joint stock companies. So, for trading securities on the stock exchange, they must get into the listing. Despite the presence on the BSE requirements of quotation sheets of the 1st and 2nd levels, this list includes only one joint-stock company. In order for joint-stock companies' securities to be listed, they must meet certain requirements. Another important factor determining the introduction of the company in the listing is the availability of links for the transfer of securities to the trading system of the exchange. Thus, in order to ensure the trading of shares on the stock exchange between the Depository serving the exchange and the Registrar of the shareholder register, a connection must be established, whereby the shares must be transferred to the Depository. On the other hand, JSCs are not professional participants of the securities market. From this point of view, the primary securities market is not carried out on the stock exchange, the stock exchange refers to

the secondary securities market. Thus, this article of the Code not only does not contribute to the development of the stock exchange, but also leads to a distortion of the value of the securities market.

One of the factors hindering the development of the securities market in the country is related to the protection of investors' rights and the level of corporate governance. Corporate governance, in General, is a system of relations that ensures the rights and interests of participants interested in the activities of the company: between the management of the company and its owners; large shareholders and small; shareholders involved in the management of the company by shareholders not involved in the management. Ensuring these interests depends on the formation of a system of internal and external control.

In General, despite the increase in the number of professional participants in the securities market, the scale and level of professionalism is still at a low level.

The system established in the country should protect the rights of shareholders and create conditions for them to exercise their rights. This system should ensure equal and fair treatment of all shareholders, including small shareholders and those who are not involved in the management of the company.

3.2. Features and current state of the market of derivative financial instruments in Azerbaijan

In Azerbaijan, the main point of purchase and sale of derivative financial instruments is the Baku stock Exchange (hereinafter referred to as the BSE), which was established on 15 February 2000. At the moment, the exchange has 20 shareholders. At the BSE trading hall is composed of 30 jobs and the Depository, in which the storage and circulation of securities. The founders of the Baku stock exchange were 16 largest banks of Azerbaijan, two financial companies and the Istanbul stock exchange. The contribution of each of them is 60 thousand Azerbaijani manats. The authorized Fund of the exchange amounted to 1.2 million manats.

The founders of the BSE are: international Bank of Azerbaijan, «Interservice»,

«Kontinentbank», «Azerigazbank», «Mars investment», «MBank», «Globalsecurity», «Capital Investmentbank», «Azerdemiryolbank», «Kochbank», «Most-Bank Azerbaijan», «Ege International Bank — Baku», «BayBank», «Rotabank», «UnitedCreditBank», «Rabitabank» and Prominvestbank. At the moment, the leader of exchange turnover: OJSC « UniCapital»

According to the Baku Stock Exchange statistical data, the volume of the government securities market amounted to 3.6 billion manats (growth for the year by 7.1 times), the turnover of the corporate securities market – 552.89 million manats (decrease by 34.3 percent), and the volume of the derivatives market - 3.46 billion manats (growth by 2.7 times). And if we consider in more detail the derivatives market, it is important to note that at the Baku Stock Exchange, derivative financial instruments for which there is daily purchase and sale operations are divided:

- Currency derivatives
- Commodity derivatives

Table 3.1. Comparative table on the results of trading at the Baku Stock Exchange on the derivatives market

Market segments	January - April 2018		January - April 2017	
	Volume of trades, AZN	Quantity of trades	Volume of trades, AZN	Quantity of trades
Derivative financial instrument market	3 463 722 464	37 760	1 276 225 411	22 270
- on foreign exchange	3 080 337 713	33 553	1 195 712 035	20 671
- on commodities	383 384 751	4 207	80 513 376	1 599

Source: Baku Stock Exchange, www.bfb.az, May 2019

On table. 3.2 foreign currencies that are used as the underlying asset of currency derivatives on the Baku Stock Exchange are reflected. Commodity derivatives on the BSE, represented by the following underlying assets:

- Gold and silver
- Oil

Table 3.2. Foreign currencies used as the underlying asset of foreign exchange derivatives on the BSE

1. USD: US Dollar	2. EUR: Euro (Currency of the European Union)	3. RUB: Russian Ruble
4. DKK: Danish Krone	5. JPY: Japanese Yen	6. PLN: Polish Zloty
7. GBP: British Pound	8. SEK: Swedish Krone	9. TRY: Turkish Lira
10. NOK: Norwegian Krone	11. NZD: New Zealand Dollar	12. HKD: Hong-Kong Dollar
13. CHF: Swiss Franc	14. HUF: Hungarian Forint	15. CAD: Canadian Dollar
16. ZAR: South African Rind	17. AUD: Australian Dollar	18. SGD: Singapore Dollar
19. MXN : Mexican Peso		

Source: Baku Stock Exchange, <https://bfb.az/>, May 2019

CONCLUSION

Based on the results of the study, a number of generalizing conclusions can be formulated, including the following.

1. Currently, there is no single approach to understanding the essence of derivatives in the world practice. According to the IMF definition, derivatives are financial instruments linked to a particular financial instrument, indicator or commodity, and through which specific financial risks can be independently traded in financial markets. The U.S. Commodity Futures Trading Commission defines derivatives as a contract the price of which is derived from the value of one or more underlying securities, indices, debt instruments, commodities, and other derivatives. In German financial law, derivatives are rights traded on the market and the price is directly or indirectly related either to the movement of the market value of securities or currency or to changes in interest rates. The English regulator defines derivatives as contracts for difference and refers futures and options to them. Azerbaijani law calls a derivative financial instrument a contract that provides for one or more obligations, for example, the obligation of one party to transfer, and the other to accept and pay for currency, goods or securities.

2. Analysis of the effectiveness of regulation, supervision and monitoring of the derivatives market at the regional and international levels showed the following.

- The main instrument limiting the exchange market of derivatives is the limits on the positions of individual players, which only formally limit the actions of speculators. Moreover, these limits are set by exchanges, are very wide and have many exceptions. Exchanges are interested in expanding the turnover that contributes to the growth of liquidity and Commission income, therefore, the establishment of limits should be the responsibility of regulators.

- Changes in the legal framework of the US and the European Union to regulate the OTC market segment are based on mandatory centralized clearing of all non-

standardized market instruments and reporting on swap transactions in trade repositories. However, neither American nor European legislation has developed specific mechanisms and rules for such regulation of the OTC market, nor the timing of the implementation of laws is constantly being postponed.

- Reform of the us banking sector, aimed at reducing the volume of high-risk transactions in the derivatives market by delineating the scope of banks ' activities, also has significant easing: banks are left to perform such operations in the interests of their customers, they can carry out investment banking services and trade government bonds. As a result, today the volume of derivatives of the world's banking corporations is much higher than the pre-crisis.

As for the international regulation of the world derivatives market, at present international organizations that have to deal with these problems do not have real authority to regulate the market and are engaged only in the development of recommendations and the preparation of various reviews.

Prospects for the development of the derivatives market are associated with the expansion of stock trading. This is due to two main reasons: firstly, the exchange is the most government-controlled financial institution, and secondly, non-standardized instruments of the OTC market in accordance with the new legislation of the United States and the European Union will have to be traded on exchanges or special swap sites.

A high degree of coordination of economic regulation is needed to limit the uncontrolled movement of speculative capital that destabilizes both national and global financial systems. However, the unwillingness of the international community to take concerted action to tighten regulation, especially Over-The-Counter derivatives market, contributes to the growth of speculative operations with these instruments and reduces the possibility of a more accurate assessment of the risks associated with them.

3. The struggle for liquidity has significantly changed the structure of the

organized market: today, exchanges compete not at the national and regional levels, but on a global scale, which requires a significant consolidation of exchange institutions and a change in the development strategy of exchanges. At present, the processes of cross-border mergers and acquisitions of exchanges and changes in their development strategy are relevant. However, one of the key areas of state policy in most countries is to maintain a leading position in the financial market. The development of national financial centers facilitates the access of foreign capital to domestic markets and increases competition for investors.

4. The volume of the global derivatives market was 556, 222 trln. USD., including 446.975 trln. USD. are spent on contracts, the underlying asset of which is interest rates, 70,809 trln. USD. - contracts with the underlying asset in the form of foreign currency, the volume of credit default swaps amounted to 12.294 trln. USD. For comparison, world GDP is 77.6 trln. USD. The volume of the global derivatives market exceeds world GDP by 7 times, the OTC market by 6 times. Forwards, swaps and options are the most common contracts in the derivatives market. More contracts accounted for the swaps, whose volume is 3-4 times higher than the volume of the markets of the other contracts. The main volume of all exchange transactions falls on contracts, the underlying asset of which is interest rates. Since 2014, there has been a rapid decline in the OTC derivatives market; in 2015 the market indicators amounted to only 78.5% of the previous year. Over-The-Counter interest rate derivatives market is represented mainly by three types of instruments: forwards, swaps and options, and the volume of the swap market exceed three times the total volume of the market of forwards and options.

The reasons for the decline in the OTC derivatives market include: tighter regulation in the derivatives market; the transfer of some standardized contracts to stock exchanges, for example, interest-bearing options, the volume of which in the OTC segment decreased, but increased on the stock exchange. The Asian sector of exchange derivatives grew by 36% in 2015, a large part of it is accounted for by the

Indian and Australian segments.

5. The process of reorganization of the OTC derivatives market has not yet been completed, some regulations are still being finalized, and new standards are being developed. In the US, the futures trading Commission has normalized all derivatives transactions, thus completely reforming the derivatives market that is in its introduction.

But the market of derivative financial instruments, as well as the securities market of Azerbaijan, regulated by the Chamber for supervision of financial markets, is not yet ready, measures have been implemented on it recently. Now the transfer of Over-The-Counter markets to electronic platforms is difficult not only in Azerbaijan, but also in many countries, either due to legal difficulties, or due to the fact that the transition requires compliance with a huge number of rules, which makes it difficult to carry out the transition quickly. The lack of international standards for some derivatives also makes the transition difficult.

In order to integrate Azerbaijan into the global financial market, it is necessary to create a major international financial center in the coming years, which will become a center of concentration of capital, various financial instruments and services. In the future, this will allow the national economy not only to be independent of foreign capital, but also to significantly increase the inflow of portfolio investments into the domestic market. Without the development of the financial market it is impossible to modernize the economy.

At the same time, under the influence of globalization processes, competition for liquidity is increasing, as a result of which the volume of derivatives trading on the world market is growing. As for the Azerbaijani derivatives market, it remains quite narrow in terms of the types and number of instruments represented on it, their liquidity and the possibility of implementing long-term futures and options strategies.

According to the author, a set of measures is necessary for the development of the national derivatives market, the main ones are the following:

- expanding the range of traded derivatives in order to attract domestic and foreign investors and increase market liquidity. Thus, it is advisable to create an exchange market of derivative contracts for energy resources and metals in Azerbaijan;

- improving the system of regulation of the derivatives market & financial market at all, taking into account the experience of developed countries, as well as problems associated with systemic risk arising from the flow of virtual capital from one sector of the world economy to another. It is proposed to support the initiative of the international financial community to introduce a tax on transactions with these instruments in the amount of 0.01% and apply this measure in the derivatives market to limit speculation with these instruments;

- creation of the market infrastructure corresponding to the international standards, namely, development of institutions of the centralized clearing and liquidation netting, and also the Central Depository and repositories. In addition, it is necessary to form a monitoring system in the structure of Baku Stock Exchange, which includes the creation of databases on significant trading positions and supervision of the actions of the largest foreign portfolio investors.

The implementation of these measures will create conditions for the development of the securities market and accelerate the growth of the economy. Thus, the stock market formed in our country can turn into the largest and most developed stock market. For this purpose, the Republic has created such promising and creating conditions for high-yield investments in the industry as extraction and processing of non-oil natural resources, tourism, agriculture and agro-industry.

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