



## THE ROLE OF SECURITIES AND DERIVATIVES MARKETS IN THE DEVELOPING NATIONAL ECONOMY

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### Abstract

*This article describes the role of securities and derivatives markets in the developing national economy. Moreover, in this article presents a scientific proposal and practical recommendations for the development of the securities market and derivatives, types of financial derivatives, improving the industry based on the study of international practice. In the article, in the course of the development and modernization of the economy, the possibilities of using the instruments of information communication systems, especially financial technologies, in the market of financial derivatives are described based on the analysis. The experiences of the economical developed and developing countries of the practice of securities and derivatives markets are studied, and the aspects specific to the economy of our country are justified.*

### Keywords:

National economy, securities, stock market, share, bond, market capitalization, securities, IPO, SPO, capital market, investor, foreign investment, fixed income securities market, financial instrument, financial asset, securities market, shareholder.

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## INTRODUCTION

The market of securities and financial derivatives plays a significant role in the development of the national economy and the increase of the population's income. Securities, especially stocks and bonds, are convenient instruments for long-term investors, while financial derivatives can bring income to investors in the short term. According to the data of global economic publications The value of global domestic equity market increased from 65.04 trillion U.S. dollars in 2013 to 98.5 trillion U.S. dollars in 2022. As of July 2023, the total market capitalization of domestic companies listed on stock exchanges worldwide recorded as 112 trillion U.S. dollars [1]. Furthermore, as of August 2020, ICMA estimates that the overall size of the global bond markets in terms of USD equivalent notional outstanding, is approximately \$128.3 trillion U.S. dollars. This consists of \$87.5 trillion SSA bonds (68%) and 40.9 trillion US dollar corporate bonds (32%) [2]. According to the the first half of 2023 BIS report the notional value of outstanding OTC derivatives reached \$715 trillion at end-June 2023, up 16% (or \$97 trillion) since end-December 2022 [3]. According to the information given in other source, the global derivatives market size was USD 21980 million in 2020 and market is projected to touch USD 54484.49 million by 2031, at a CAGR of 8.6% during the forecast period [4]. Considering these



indicators, the circulation of securities and financial derivatives is of great importance in the development of the national economy.

Through the development of the stock market in developing countries, it is possible to quickly obtain the financial resources necessary for national enterprises, as well as to achieve a stable national economy, in particular, an increase in the production volume of the gross domestic product. Especially, according to the information provided by the international publication TheGlobalEconomy.com, the stock market capitalization as percent of GDP in 2020, it showed Hong Kong 1777.23 percent, Iran 508.22 percent, Saudi Arabia 330.82 percent, South Africa 1051.53 percent, Switzerland 270.52 percent, USA 193.35 percent, Singapore 187.32 percent, Canada 160.32 percent, also by stock market capitalization, billion USD it had information for USA 40719.66 billion USD, China 12214.47 billion USD, Japan 6718.22 billion USD, Hong Kong 6130.42 billion USD, Canada 2641.45 billion USD, India 2595.47 billion USD, Saudi Arabia 2429.1 billion USD results have been achieved[5]. At this point, it should be noted that the level of development of the stock market is important for increasing the income of the population, if there are highly liquid and profitable financial instruments in the stock market, private savings will become investments.

### **THE RELEVANCE OF THE RESEARCH SUBJECT**

The development of the market of securities and financial derivatives, the creation of convenience for investors through the efficient organization of operations in it is the main topic of constant scientific research. In some developing countries there are have problems such as, market manipulation, systemic risk, legal risk, and transactions risk, regulatory issues, and financial crises, market risk, liquidity risk, credit and counterparty risk, the deficit of financial instruments in the stock market, the low level of attractiveness and liquidity of assets, delays of dividend payments to shareholders and other problems prevent the development of the industry. For this reason, a comprehensive and in-depth study of the factors and problems of development of the securities and derivatives market, the wide involvement of free funds of foreign and local investors, the use of advanced foreign experience in this area, analysis of the real situation and making proposals for troubleshooting problems are important.

### **THE PROBLEM OF THE RESEARCH**

There are large-scale research on the role securities and derivatives markets in the developing national economy. They cover mainly derivatives types and capitalization, the role of the capital market in the economy, the types and essence of financial instruments, the importance of attracting free financial resources of investors to the securities and derivatives market, as well as the issues of control in the stock market. However, in these studies insufficiently identified actual problems associated with the development of the securities and derivatives markets in the developing national economies by attracting free funds of investors and using modern financial technology. Assessing the risk level of financial instruments, preventing speculation in their circulation, increasing the amount of freely traded shares, making dividend payments on time,



ensuring high growth in the securities and financial derivatives markets so far, they have not found their positive decision. This, in turn, determines the relevance of the study on the involvement of free financial resource of investors to the capital market with the improving real situation on the securities and derivatives markets in the developing national economy.

### **THE PURPOSE OF THE RESEARCH**

The purpose of this study is to develop scientific conclusions and recommendations on issues related to the role securities and derivatives markets in the developing national economy.

### **THE SCIENTIFIC ESSENCE OF THE RESEARCH**

The theoretical and methodological aspects of the role securities and derivatives markets in the developing national economies have been widely covered in the research works of foreign scientists-economists, such as Lannoo K., Thomadakis A.[6], Hao X., Sun Q., Xie F.[7], Hofmann B., Shim I., Shin H. S.[8], Piñeiro-Chousa, J., López-Cabarcos, M. Á., Caby, J., & Šević, A.[9] analyzed economic process in capital markets and gave their opinion about development of the securities and derivatives markets.

According to economists, "Derivatives have become increasingly important in finance over the last 30 years. Futures and options are actively traded on many exchanges around the world. Various types of forward contracts, swaps, options and other derivatives are sold and bought in the over-the-counter market by most financial institutions, fund managers and corporate entities"[10]. It should be noted that the derivatives market is expanding from year to year, and the volume of sales in it is increasing in terms of value and quantity.

According to economists Luis Ospina-Forero, Oscar M. Granados, "in the last few years, FX derivatives have gained a significant market share and in some cases they are even preferred over FX futures as tools to reduce the risk of currency fluctuations. was seen. FX derivatives include FX swaps and outright forwards, non-deliverable forwards (NDF) and FX options (OPT) segment"[11]. As noted in the study, FX, i.e. Foreign exchange, is an international currency market, in which currency trading is carried out on a pair basis, and the largest derivatives market is also considered in this network.

From uzbek economic scientists S.E.Elmirzayev[12] who researched of influencing corporate governance for the developing of the securities market, F.T.Mukhamedov, O.Alimov[13] researched on improving the system of trade in securities in Uzbekistan and the problems of, as well as scientists in this area, Tashmuradova B., Hamdamov O.[14], J.Kurbonov, S.Omonov, K.Khamzaev[15], Sherkuziyeva N., Urazmetov F.[16], SH.Otaxonova[17] conducted their own studies and developed suggestions and recommendations on the development of the securities and derivatives market.



## RESEARCH METHODS

Scientifically, there are several research methods in the article while analyzing the role securities and derivatives markets in the developing national economy. It can be seen that induction, deduction, comparative analysis, trend analysis, abstract and other methods are used in the research.

## ANALYSIS AND RESULTS

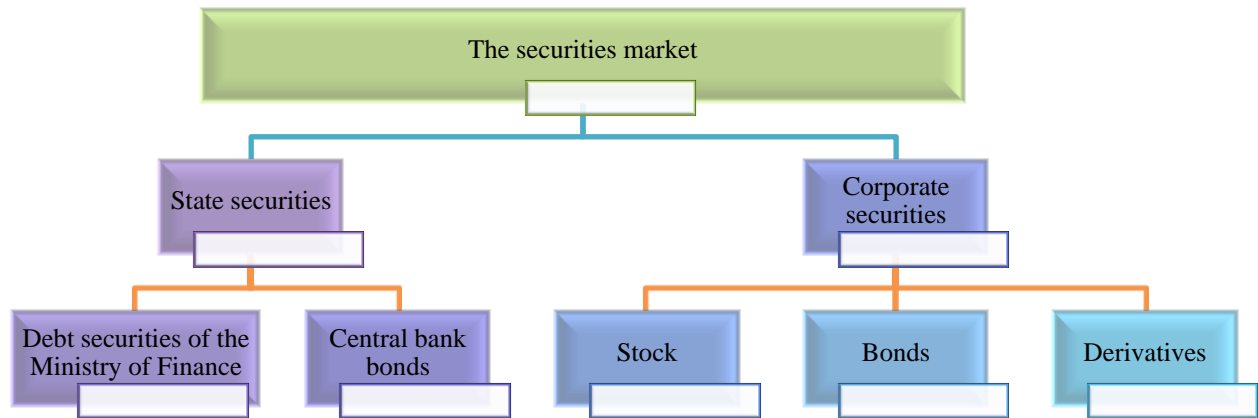
The market of securities and derivatives, which are part of the financial market, is expanding year by year. According to economical publication global market cap share as of Q2 2023 was \$108.6T (figure 1).

Country / Region	Market Cap	Share (%)
U.S.	\$46.2T	42.5%
EU	\$12.1T	11.1%
China	\$11.5T	10.6%
Japan	\$5.8T	5.4%
Hong Kong	\$4.3T	4.0%
UK	\$3.2T	2.9%
Canada	\$3.0T	2.7%
Australia	\$1.7T	1.5%
Singapore	\$0.6T	0.6%
Rest of Developed Markets	\$10.2T	9.4%
Rest of Emerging Markets	\$10.0T	9.2%
<b>Global Total</b>	<b>\$108.6T</b>	<b>100.0%</b>

**Figure 1. Global market cap share as of Q2 2023 trillion USD[18]**

The data of Figure 1 shows the level of capitalization of the stock market in the global economy, and we can see from the data that this indicator was 46.2 trillion USD in the United States, 12.1 trillion USD in the European Union, 11.5 trillion USD in China.

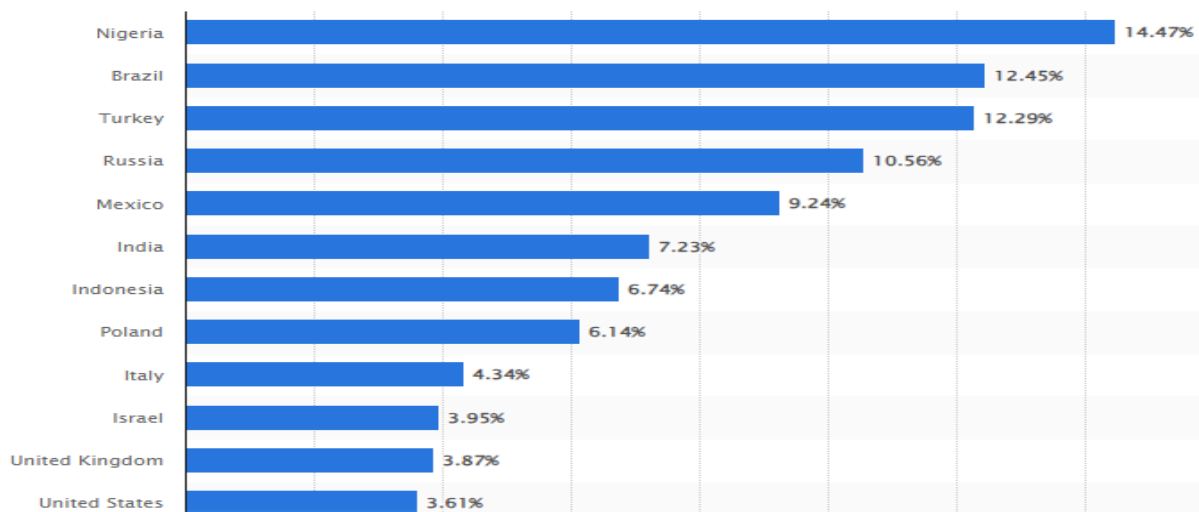
The securities market is divided into state securities and corporate securities. Moreover, each market is divided into several separate segments (Figure 2).



**Figure 2. The structure of a securities market**

The figure illustrates the structure of a securities market. It can be seen that state securities consist from debt securities markets of the Ministry of Finance and market of central bank bonds. Furthermore, corporate securities market divided into 3 segment.

In the state securities market, countries issue debt obligations on their own behalf in order to fill the budget and earn money for cash operations, that is, they issue bonds to local and foreign investors or treasury obligations issued by the Ministry of Finance. According to the legislation of Uzbekistan, government securities - treasury bonds of the Republic of Uzbekistan and bonds issued by an authorized body of the Republic of Uzbekistan, as well as bonds of the Central Bank of the Republic of Uzbekistan[19]. In international practice, government securities are very important for attracting financial resources to the social direction of the national economy. We can see the government securities with high yield through the image below (Figure 3).



**Figure 3. Yield on 10-year government bonds in the largest economies worldwide as of April 2023, by country[20]**



The bar chart was demonstrated yield on 10-year government bonds in the largest economies worldwide as of April 2023, by country. Overall, it can be seen that developing countries issue debt obligations at high interest rates because they need more and short-term resources(Figure 3).

In the world, we can see the practice of attracting debt through sovereign bonds in all developed and developing countries(Figure 4.).



Figure 4. European outstanding ESG sovereign bonds (EUR bn, 2016-2023)[21]

It was shown European outstanding ESG sovereign bonds for period from 2016 to 2023 year in figure of 4. At the beginning of the period, in 2016, European outstanding ESG sovereign bonds equal for 1 EUR bn and at the end of shown period it was 406 EUR bn.

The distribution of income among investors in the stock market depends on the attractiveness of the capital market. The main focus of investors participating in the stock market is the securities of companies operating in countries such as the United States, Japan, the United Kingdom and China. In developed countries, profitable companies play an important role in increasing the attractiveness of the stock market and attracting investors' free funds. In particular, when we analyze the stock markets of developed countries, we can observe the participation of large national and transnational corporations.



Figure 5.Total market capitalizations of domestic companies listed on stock exchanges worldwide from 2013 to July 2023(in trillion U.S. dollars)[22]

The bar chart illustrates total market capitalizations of domestic companies listed on stock exchanges worldwide from 2013 to July 2023 in trillion U.S. dollars. If it was 65,04 trillion U.S. dollars in 2013 and in July 2023 it became 112 trillion U.S. dollars. Overall, it can be seen that the highest result was in 2021. From figure of 5, we can see equity market capitaliation of domestic stock exchange (figure 5).

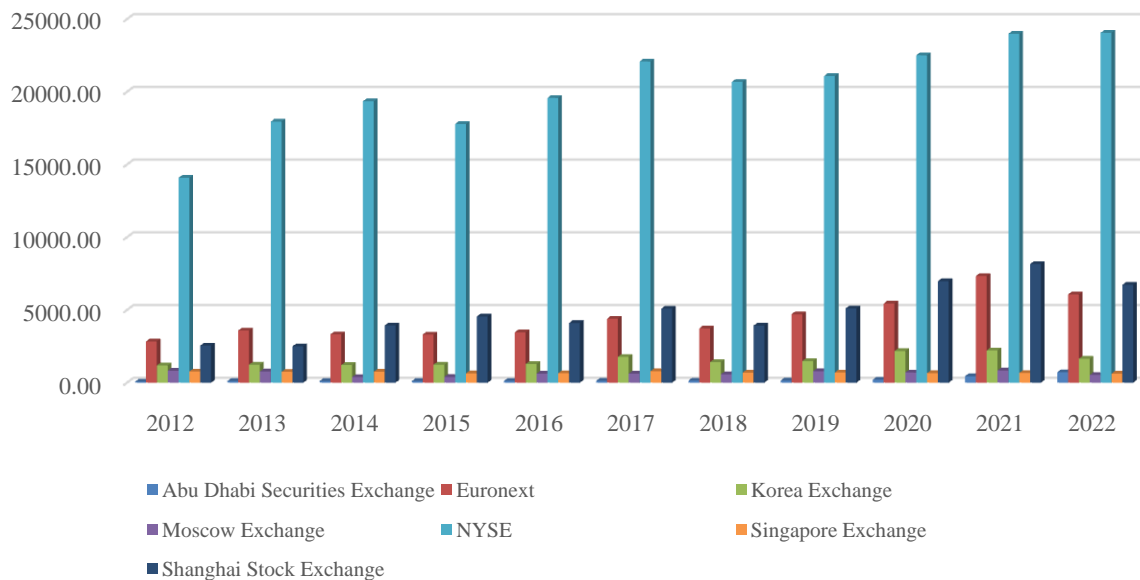


Figure 5.Total Equity Market - Market Capitalisation[23]

The bar chart illustrates total equity market capitalisation of the largest exchange such as Abu Dhabi Securities Exchange, Euronext, Korea Exchange, Moscow Exchange, NYSE, Singapore Exchange, Shanghai Stock Exchange. From the given information we can see that the



total equity market capitalisation was 67,19 billion USD in 2012 Abu Dhabi Securities Exchange and in 2022 the result changed for 714,8 billion USD. Furthermore, the highest results was seen for NYSE. If the total equity market capitalisation of NYSE was 14,08 in trillion U.S. dollars in 2012 after 11 years it was 24,06 trillion U.S. dollars.

The development of the capital market in the national economy and its integration with the global stock market will be an important factor in meeting the demand for financial resources for local businesses and the development of their businesses. In particular, if we look at the experience of China, Japan and Singapore, the privatization of the country and the sale of state-owned enterprises to foreign investors through the stock market has created a new flow of financial resources and played an important role in national economic development.

Several factors influence the growth of the gross domestic product in the national economy. In particular, the trading volume of the stock market, in turn, is important for the companies that create the gross national product. Because companies issue securities for financing new projects through the stock market.

Below is the World Bank's data on gross domestic product, share trading and capitalization, and we can expect annual growth trends (Table 1).

Table 1

**Information about World GDP, Foreign direct investment, Stocks traded, Market capitalization of listed domestic companies[24]**

Year	GDP (current trillionUS\$)	Foreign direct investment, net outflows (BoP, current trillion US\$)	Stocks traded, total value (current trillion US\$)	Market capitalization of listed domestic companies (current trillion US\$)
2005	47,86	1,42	44,72	40,51
2006	51,86	2,15	57,76	50,07
2007	58,45	3,20	88,39	60,46
2008	64,23	2,60	83,87	32,42
2009	60,89	1,35	66,57	47,47
2010	66,71	1,79	70,09	54,26
2011	73,97	2,22	72,89	47,52
2012	75,61	1,72	58,27	54,50
2013	77,71	1,99	63,70	64,37
2014	79,84	1,80	74,94	67,18
2015	75,28	2,20	101,17	62,27
2016	76,52	2,11	77,67	65,12
2017	81,48	2,09	77,70	79,50
2018	86,54	0,70	68,25	68,89
2019	87,78	1,51	61,14	78,83





The table shows the results of world GDP, foreign direct investment, stocks trading from 2005 to 2019. Overall, it is evident that 2 results(GDP and Market capitalization of listed domestic companies)fromfourwas steadily increased and also we can see the relationship between the factors in

Table 2

Linear regression of factors<sup>1</sup>

GDPcurrentUS	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Foreign direct investment, net outflows	-8.078	3.263	-2.48	.031	-15.261	-.896	**
Listed domestic companies	4.473e+09	1.392e+09	3.21	.008	1.408e+09	7.538e+09	***
Market capitalization of listed domestic companies	.447	.144	3.11	.01	.13	.763	***
Constant	-1.342e+14	5.507e+13	-2.44	.033	-2.554e+14	-1.299e+13	**
Mean dependent var	70981689398829.594		SD dependent var		12132978174203.301		
R-squared	0.790		Number of obs		15		
F-test	13.769		Prob > F		0.000		
Akaike crit. (AIC)	929.953		Bayesian crit. (BIC)		932.785		
*** p<.01, ** p<.05, * p<.1							

We can see to what extent selected factors: foreign direct investment, listed domestic companies, market capitalization of listed domestic companies affect GDP growth. Also, the stock market is of great importance to the development of the national economy in general. In the course of our research, we analyzed the level of correlation of stock market indicators over the last 15 years, i.e. in 2005-2019 (figure 5).

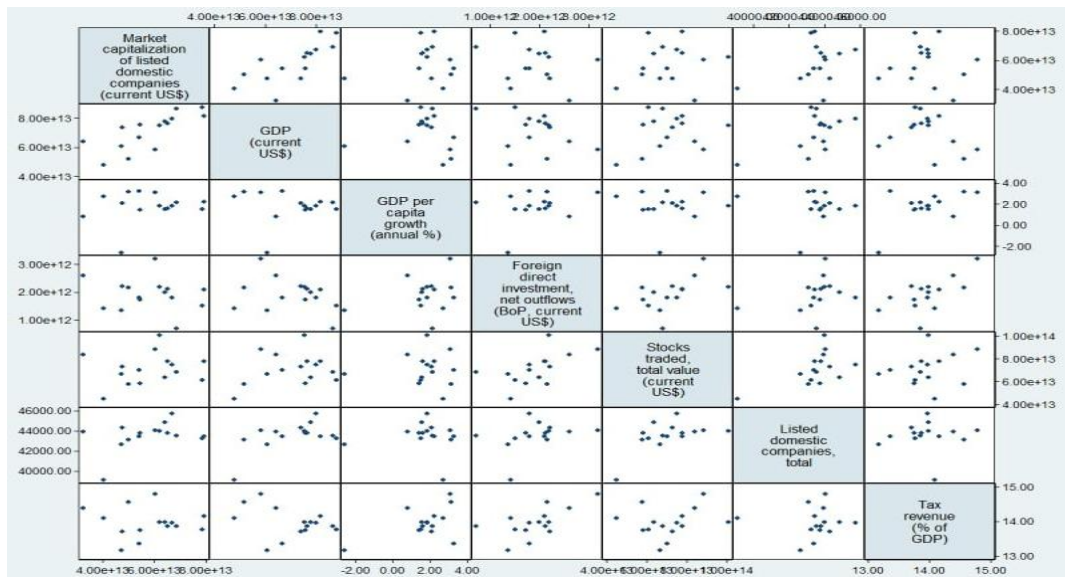


Figure 5. Factors affecting GDP on the topic of scientific research (correlation check in Stata program)<sup>2</sup>

<sup>1</sup> It was prepared by the researcher using Stata software



The figure illustrates connection of several factors such as GDP (current US\$), GDP per capita growth (annual %), foreign direct investment, net outflows (BoP, current US\$), stocks traded, total value (current US\$), listed domestic companies, total, tax revenue (% of GDP), market capitalization of listed domestic companies (current US\$).

As factors influencing the further development of the stock market and attracting broadly local investors, we can first of all point to the real growth of incomes in the country and the effect of investment in financial markets. Examples of the main forms of earning income from securities, which are financial assets in the stock market, are annual and quarterly dividends, profit from price increases or decreases, interest payments and capital gains[25].

With larger stock markets recording millions of transactions per day, the question arises of how to track stock market developments. Generally, this is achieved via a stock market index, which follows the price development of a group of financial assets traded on an exchange from a single point in time via a single aggregated value. There are several indexes in the world, some very broad and inclusive, while others are focused on specific sectors or asset classes. Also, we must pay attention in using financial technologies.

When we say financial technologies, we can recognize a set of all types of tools and programs used in the economy in the implementation of financial services, ensuring the movement of financial assets and instruments. Examples include banking mobile applications, international and local money transfer systems, payment systems, and others used by banks and their customers[26].

The development of the financial derivatives market within the stock market is very important for companies and investors.

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<sup>2</sup> It was prepared by the researcher using Stata software

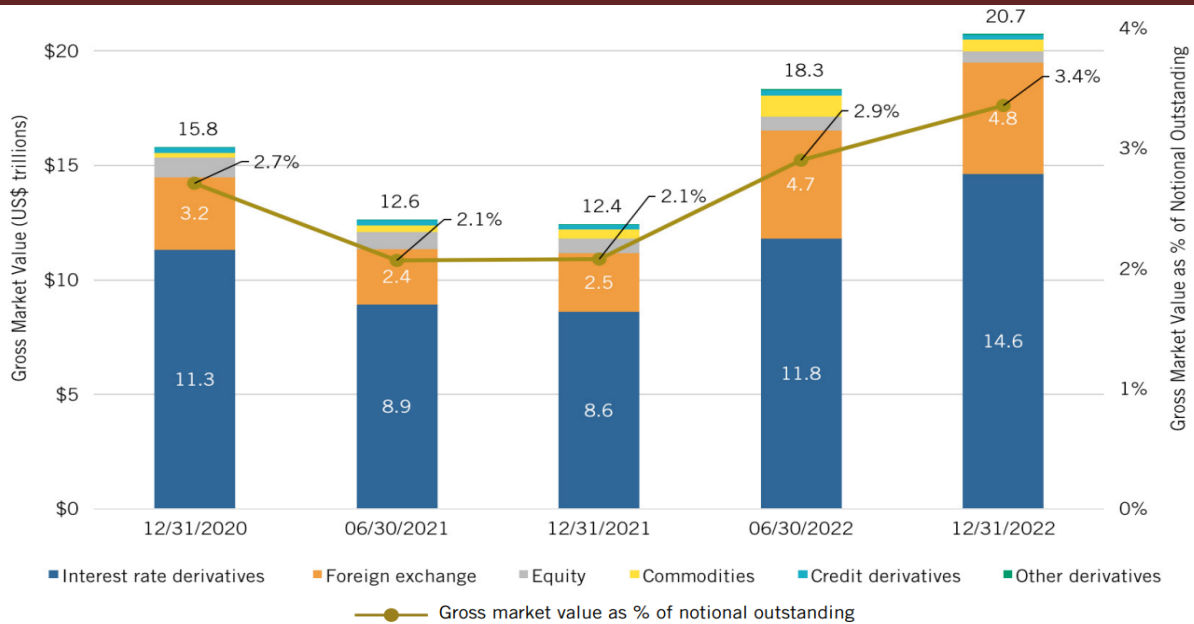


Figure 6. Gross Market Value of Global OTC Derivatives, Source: BIS OTC Derivatives Statistics[27]

It is known from international practice that the main derivative securities in the derivatives market are futures, forwards, options, swaps and CFDs, which are traded on organized and unorganized stock exchanges.

### CONCLUSIONS AND PROPOSALS

The highest position is the role securities and derivatives markets in the developing national economy. So, that, we should done modernization and progressive development of these spheres. Based on the above scientific research and analysis, the following recommendations were made:

- wide attraction of free funds to the stock market, thereby achieving mutual efficiency, further increasing the financial literacy of the population;
- expanding the flow of domestic financial investments in the stock market;
- simplification of the system of normative and legal acts of the securities market and development of a general code;
- wide introduction of financial technologies in the field;



- simplification of the licensing procedure for professional participants of the securities market to conduct operations in the securities market.

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