

Leaders in the on-line trading market in Ukraine: stock exchanges, brokers, and brokerage trading systems

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Abstract Banking institutions play the leading role in the economy development through participation in the redistribution of financial resources. However, the current situation is characterized by the minimum lending banks activity and low deposit rates. Thus, the leadership in the redistribution of financial resources was proposed by the securities market. We are analysing the current state of Ukrainian stock exchange. Our contribution provides a comprehensive and concise overview of the issue of the main tendencies and problems of the market of derivative securities. We are presenting the results of comparative analysis of actual financial technologies, in particular brokerage trading systems.

The conducted research allows putting forward a number of recommendations as for the development of the securities market on the example of innovative financial technologies. Nowadays the whole line of commodity futures is offered on the Ukrainian market. In spite of the fact that there are different types of derivatives, it is necessary to introduce their new types and strengthen the liquidity of all financial instruments. It is also necessary to introduce double listing rules which allow entering the securities from foreign markets to be traded on Ukrainian exchanges. However, it is impossible to implement these rules without state support, in particular, without adjusting investment and currency regulations by the National Bank of Ukraine (NBU). Therefore, it appears crucial to improve the legislative framework, strengthen consumer protection, and enhance reliability and ease of use.

1 Introduction

Ukrainian stock market has a number of obvious problems: underdeveloped legislative framework, infrastructure and, the most important, not high enough liquidity. Despite this fact, it has taken its place in redistribution of financial resources because of introducing financial innovations, among which Internet trading is the key financial innovation. The official pre-announced start of online trading is March 26, 2009. This technology has enabled private equity to be effectively absorbed, with the peak of private investors on the securities market accounting for almost 45%. Then the technology began to spread among stock exchanges and brokers.

Today, “Ukrainian stock exchange”, “Stock exchange PFTS” and “Stock exchange Perspective” have shared the leadership among the stock exchanges. For private investors, the competition among the stock exchanges has been reduced to the variety of financial instruments at the level of liquidity and so on. The launch of derivatives on the Ukrainian stock exchange, namely the UX index futures and option on futures was an important stage in the development of securities market. The competition among brokers, besides the usual service and tariffs, was reduced to the software which is used by investor to carry out transactions with financial instruments - the brokerage trading system.

The issue of derivative securities market in Ukraine was the subject of our own previous research (Khvostenko 2017; or Khvostenko 2016) but developing new technologies and changing Ukrainian economy demands to investigate leaders on the Internet trading market in Ukraine.

2 Internet trading

Globalization and the development of information financial technologies led to introduction in Ukraine Internet trading in general and electronic trading systems in particular. Through the efforts of brokers, the essence and advantages of Internet trading technologies and online brokerage was reported to the general public. The main advantages are as follows:

- direct access to stock information;
- online instruments for technical analysis and forecasting prices on assets;
- online monitoring of current market positions;
- low brokers' commission due to lack of paperwork and other transaction costs;
- low entrance threshold;
- providing a wide range of financial instruments;
- providing a loan leverage;
- operational technical support and much more.

When investigating online trading on the securities market, two basic concepts should be distinguished – internet-trading and online brokerage. Online brokerage should be considered as the service of the professional market player (broker) who, on behalf of the client, conducts securities transactions. Herewith, the client's order is carried out by means of client's application in a special software complex and processed automatically. A broker can serve an unlimited number of clients at the same time. The broker receives such opportunities as becoming a member of stock exchange and obtaining so-called stock exchange gateway. After that, he can provide online trading services to users.

A popular definition of Internet trading is the following: *“the mechanism for conducting a securities transaction through the Internet using special software”* (Harrington et al. 2000). A more precise definition of online trading describes it as a *“technology to make agreements with securities, which allows the company-broker to serve automatically unlimited number of customers, sending information about their applications directly to the trading system of the stock exchange”* (Investopedia 2019).

Internet trading is a mechanism to trade on the stock exchange through direct electronic access. On the other hand, electronic trading represents a system of work with securities which allows the investor to get direct access to stock information, as well as to enter into deals to sell securities on the stock exchange in real time (Yermack 2017).

According to the analysis of Internet trading definitions, it should be noted that this technology involves not only the work with securities, as domestic researchers believe, but using the Internet and special software, it is possible to trade on the foreign exchange market and work on world commodity exchanges, etc. Therefore, one should distinguish online trading on the securities market and on the other markets.

According to the results of analysis, the essence of the definitions of Internet trading is proposed to understand as the financial technology used to conduct transactions with assets on the relevant exchanges in real time, using the Internet and special software – brokerage trading systems.

3 The market of derivative financial instruments

The stock market of any modern economy cannot be considered as developed without derivative financial instruments on it. The development of brokerage trading systems is an incentive to develop derivatives. The instruments of derivative securities market through hedging operations play an important role in managing financial risks and are actively used for these purposes in the global derivative markets. The main advantages of derivatives, in particular futures, are as follows:

- the most liquid financial instrument on the Ukrainian stock market;
- minimal spread due to active market-maker programs;
- various trading strategies, including using options on futures for the stock index;
- allows effective hedging the price risks of the shares' portfolio included in the index;
- minimum transactional costs;
- market pricing.

It is considered that the Ukrainian derivative securities market significantly differs from derivative securities markets in developed economies. These differences are manifested in the volumes of trades and in the structure of financial instruments that are traded on the market. On the quantitative side, the volume of derivative securities market in Ukraine is much less than abroad.

In contrast to the structure of world derivative securities markets, where there is a tendency to preferential handling of forward contracts. In Ukraine, the derivatives securities market is a fairly young segment of the financial market and it is represented by futures contracts, options and option certificates. The largest share in the structure of derivatives trading market belongs to futures contracts.

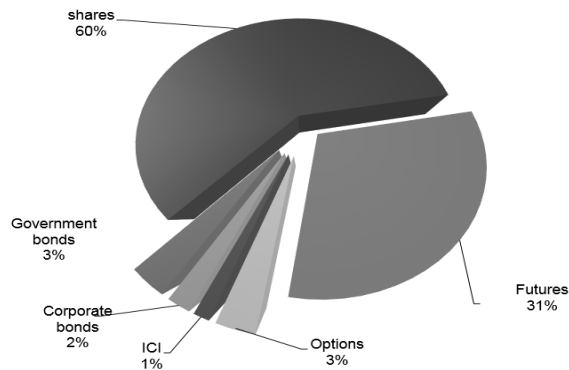


Fig.1. The structure of trades on the «Ukrainian stock exchange»

Source: <http://www.ux.ua>

According to “Ukrainian stock exchange” Plc., now there are futures contracts on the currency pairs USD – UAH, USD – EUR, gold and the Index of Ukrainian shares for 6 months. The largest volume of trades is occupied by futures contracts on the currency pair USD – EUR. It is explained by high predictability of the rates of these currencies and, consequently, the low risk of such term contracts. Gold contracts are also popular.

Table 1. Comparative characteristic of futures contracts on gold

Indicator	UX	MOEX	CME GROUP		Eurex
			COMEX	CBOT	
Base asset	Refined gold in ingots				
Date of commencement of trading	28.01.2015	08.06.2006	31.12.1974	20.02.1979	10.09.2009
Contract volume	1 troy ounce		100 troy ounces		
Contract price	Indicated in USD per troy ounce				
Method of execution	Financial calculations		Financial calculations and physical delivery		Financial calculations
Depth (duration) contracts	The next 2 quarterly contracts		Every second month of the next two years, plus June and December contracts for the next four years		The next 3 months and 4 quarterly contracts

Source: Own results

The pricing procedure for futures on the price of refined gold is as follows:

- World price on gold is formed on the London Bullion Market (LBMA);
- Twice a day (at 10:30 and 15:00 local time in London) clearing transactions with physical gold is performed for authorized participants in the procedure (including transactions of their clients);
- According to the results of clearing, the average price of transactions of participants with gold is fixed, which is published in the system of LBMA;
- Data Acquisition Manager is ICE Benchmark Administration (IBA);
- Gold price LBMA is the benchmark for all the gold market participants in the world.

Thus, the main participants in clearing are the following banks: Barclays Bank, The Bank of Nova Scotia, HSBC, Societe Generale, and UBS. In view of this, a future on the price of refined gold is a promising and effective financial instrument. The results of the analysis allow to state that the market of derivative securities in Ukraine is not underdeveloped, although it requires constant investments. The cyclical and systemic crises in the economy of Ukraine and the world have a tremendous effect on the state of the economy. The volumes of trading in derivative securities are characterized by high volatility. Thence, unlike previous years, the importance of the speculative function of derivative securities market is gradually decreasing, while the value of the hedging function is increasing.

Among the factors hindering the development of derivative security market, as before, the leading place belongs to generally systemic factors, namely: the shortcomings of legislation, the level of development of infrastructure of derivative securities market, as well as the current state of development of base asset markets. Internal factors include the riskiness of operations in the derivative securities market. The main risks inherent in the market of derivative securities include currency, interest-bearing, credit and operational risks.

4 Brokerage trade systems

Brokerage trade system (BTS) should be considered as a set of computing tools, software, databases, telecommunication facilities and other equipment that provides collection, storage, processing and disclosure of information necessary for Stock Exchange to organize securities trading using trade server. The feature of the stock market is that this market is organized, the tools are standardized but software must be certified.

In order to provide recommendations to develop the market of brokerage trade systems, they were analyzed. To do this, the experts were selected. They were proposed to compare existing BTS based on the developed criteria: information support, friendly interface, speed of BTS operation, BTS payment, complexity to install, quantity of brokers providing BTS, capabilities of BTS (number of functions), complexity of mastering.

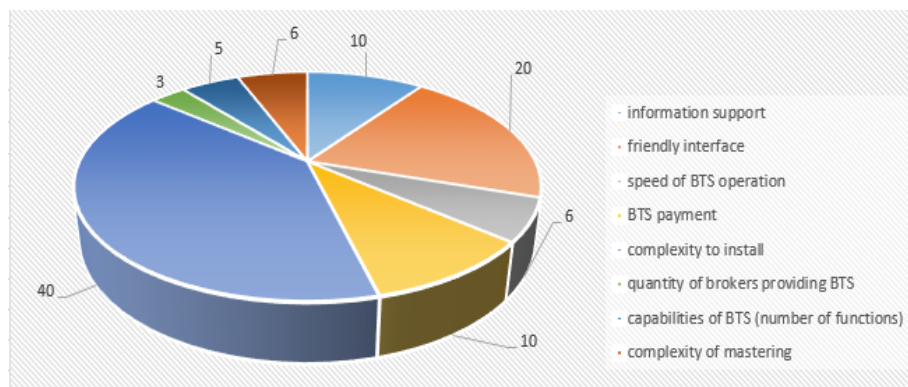


Fig. 2. Specific weight of the criteria to choose brokerage trade systems
Source: Own results

According to the results of the study, it is established that the system TRADERNET, which was chosen as the best by 35% of respondents, prevails, on the second place – QUIK software – 20% of respondents. In addition, it was found that the TRADERNET program was chosen because of web version that does not require installation on a personal laptop.

In turn, the popularity of the QUIK program is due to a wide range of functions. The main advantages of the ALOR TRADE brokerage trading system are the following:

- possibility to work simultaneously in several accounts at one terminal;
- provides the function of sub-administration of additional accounts;
- possibility to communicate with technical support inside the system;
- possibility to choose the language of the interface: Russian or English;
- possibility to transfer information about the dynamics of trading in real time mode to standard office applications, for example, in Excel.

GLNET's trade system is important to develop the securities market, as it is an opportunity for foreign investors to carry out operations on the domestic market. Distribution results are shown in Figure 2 above.

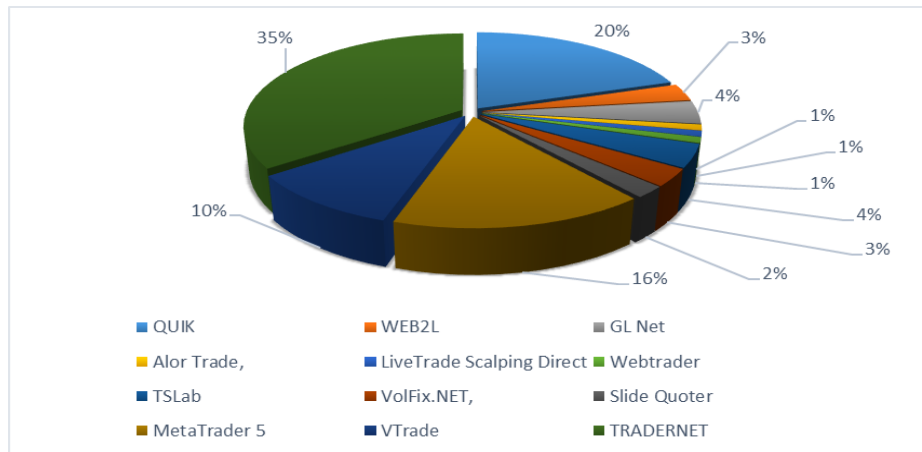


Fig. 3. Specific weight of the popularity of brokerage trade systems
Source: Own results

The software complex SLTrade is new on the securities market. It is intended to organize Internet trading through the protocols Plaza and Plaza II, MICEX and the protocol of “Stock exchange Perspective”.

5 Conclusions

Thus, one can see that the securities market in Ukraine is at the stage of the active use of innovative technologies without which due to globalization, the growth of capital flow and improvement of financial culture of the population is impossible. Internet-trading as an innovative financial instrument in the stock market will help to attract financial resources of private investors. That will also increase the efficiency of capital markets.

Our research and its main results and outcomes allow us to put forward a number of recommendations as for the development of the securities market on the example of innovative financial technologies. Nowadays, the whole line of commodity futures is offered on the Ukrainian market. In spite of the fact that there are different types of derivatives, it is necessary to introduce their new types and strengthen the liquidity of all financial instruments. It is also necessary to introduce double listing rules which allow entering the securities from foreign markets to be traded on Ukrainian exchanges. But it is impossible to implement these rules without state support, in particular, without adjusting investment and currency regulations by the National Bank of Ukraine (NBU).

Therefore, it is necessary to improve the legislative framework, strengthen consumer protection, reliability and ease of use. We might also conclude that the further development of electronic technologies is a guarantee for Ukrainian market to reach international standards and improve the investment attractiveness of foreign capital.

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