

Economic Essential of Stock Infrastructure and Features of Its Development

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Abstract- This article discusses the theoretical issues of stock market infrastructure. The author analyzes the evolution of stock infrastructure, the tendency of its development relative to the market has twice changed. In addition, it was revealed that needs were first formed, and only then the possibilities appeared for the emergence of new types of activities, institutions and structures serving this market on the basis of directed specialization and division of labor. At the end of the article, features of the development of stock market infrastructure in Uzbekistan are listed.

Keywords: Fund, stock market, stock market infrastructure, securities, stock exchange.

1. INTRODUCTION

Structural reorganization in all spheres of social production as a result of market transformation of the Russian economy was most clearly manifested in the process of formation and development of the securities market, which contributes to a faster rate of its integration into the world market economy.

As the world experience shows, as the market relations develop within the stock market, an adequate infrastructure develops that is its integral and integral part and ensures the conditions for the effective functioning and development of the securities market and the economy as a whole through various organizational forms and structures, mechanisms and tools. Effective infrastructure requires the creation of a unified system that provides a full technological cycle for the issuance, storage, circulation and redemption of securities, ensuring liquidity, security, efficiency and reducing the transaction costs of securities transactions, which implies the formation of the appropriate quality and quantity of constituent elements of the stock infrastructure.

The task of forming an integral and effective stock infrastructure becomes a priority for the state and participants of the securities market in order to increase the competitiveness of the national stock market and create conditions favorable for domestic companies to carry out operations within it, counteracting the outflow of the main liquid assets from the national capital market under foreign jurisdiction, Return their circulation to the domestic market and strengthen investor confidence. In addition, the demand for infrastructure infrastructure services is expected to increase as a result of the development of the mortgage and derivative securities market, which will facilitate the revival of trade in various sectors of the stock market. In this regard, it is important to study the development of the infrastructure of the stock market of Uzbekistan, the specifics of its formation and functioning with the purpose of improving existing elements on the basis of identifying the problems of their functioning.

2. LITERATURE REVIEW

The work of such authors as M. Agarkov, T. Adekenov, G. Aksenova, M. Alekseev, B. Alekhin, P. Bekarevich, T. Berdnikova, N. Berzon, E. Sh. Bradley, A. Burenin, A. Bychkov, V. Galanov, Yu. Golitsin, M. Gracheva, A. Gryaznova, A. Dombrovsky, A. Zhinkin, E. Zhukov, P. Zolotarev, Ivanov, E. Karlikov, Yu. Kafiev, T. Kayachev, N. Kleshchev, R. Korneeva, P. Lanskov, M. Laufer, G. Margolit, A. Mertens, N. Meshcherova, V. Milovidov, N. Milchakova, J. Mirkin, E. Mironov, I. Moryakov, V. Naliva, Ovchinnikov, L. Pavlova, K. Penzin, V. Petrov, O. Petrova, A. Popova, Remnev, B. Rubtsov, E. Semenkova, Yu. Sizov, V. Soldatkin, D. Soloviev, O. Strahova, A. Suetin, V. Tarachev, S. Tomlyanovich, A. Tregub, R. Tulles, O. Uvarov, L. Chaldaeva, B. Cherkassky, S. Yakovlev, etc. Theoretical and methodological aspects of the market infrastructure with varying degrees of completeness were considered in the works of such domestic and foreign scientists as E. Borisov, K. Wicksell, K. Jones, O. Inshakov, Livshits, F. Clarke, G. Muftiev, S. Nosova, D. North, P. Rosenstein-Rodan, P. Samuelson, A. Seleznev Evgeny, A. Sazhin, D. Simons, E. Smirnova, O. Williamson, P. Shniper and others. In the process of developing the author's concept of infrastructure development, the results of studies by E. Mukhanova (theoretical foundations and ways of forming market infrastructure), A. Novoselov (problems of formation and development of market infrastructure in the region), E. Russkova and others were used.

3. ESSENCE OF THE STOCK MARKET INFRASTRUCTURE

In the modern economic literature there are various interpretations of the concept of both the market infrastructure in general and the stock infrastructure in particular.

The variety of definitions and ambiguous interpretations are due to the existence of many different approaches to determining the content of these concepts.

On the subject of research in modern science are three main groups of definitions of market infrastructure.

1. Market infrastructure - a set of industries and spheres of activity, the functional purpose of which is to create common conditions that ensure the effective development of production and the market. In particular, within the framework of this approach, Karenov adheres to this interpretation of the market infrastructure [1] ("... a complex of industries, sub-sectors and spheres of activity whose main task is to bring goods from production to consumers ...") and E. Mukhanova [2] ("... a unified system consisting of segments serving different types of markets ...").
2. Market infrastructure - a complex of enterprises, institutions and organizations. From the position of institutional approach G.Muftiev [3] defined the market infrastructure as "... the framework of the market, which is a branched and interconnected network of enterprises and economies for servicing the processes of exchange and movement of goods ...", V.Novikov [4] - as "... the totality of state and non-state enterprises and institutions that ensure the functioning of commodity, financial, foreign trade and labor markets ...".
3. Market infrastructure - a set of technical equipment and equipment that provide market processes. In the context of this definition, I. Belyavsky [5] assigned the infrastructure of the market the role of the system of "... auxiliary and servicing units and funds that organizationally and materially support the main market processes."

Despite the various interpretations of the concept of "infrastructure", its general feature is traced the creation of conditions for the formation, development and effective functioning of the market. Being in close interaction with the entire system of economic relations of the reproduction process, the infrastructure of the stock market acts as a necessary condition for the favorable development of all economic agents of market relations.

Since the infrastructure of the stock market is an integral part of the market infrastructure, it has the same approaches to determining the essence of its content. Here are just some examples of definitions of the infrastructure of the stock market in the framework of existing approaches.

The most typical for the institutional approach definition of the infrastructure of the stock market leads V. Galanov and A. Bassov, who view the infrastructure as "... a set of organizations that serve the stock market and specialize in providing services to all its participants." [6]

As "... a set of systems that ensure the functioning of the market ..." examines the infrastructure of the securities market Y. Sizov. [7]

An interesting approach to the stock infrastructure as a "risk management system in the stock market." This specific interpretation is held by Ovchinnikov [8], which discloses the concept of the stock market infrastructure as "... a global tool for protecting investors' rights from crises".

Synthesis of several approaches at once can be considered the following sufficiently capacious definition, in which "... the infrastructure of the securities market means a set of technologies used in the market for the conclusion and execution of transactions, materialized in different technical means, institutions (organizations), norms and rules".

Critical analysis and generalization of the basic scientific approaches to the definition of the concept of "infrastructure of the stock market" allowed the author to conclude that there is no single approach to both the definition of the concept and the disclosure of its essence. Comparison of the main ideas that reveal the economic essence of the concept of "stock infrastructure" made it possible to single out four main groups of definitions on the subject of research:

- a set of markets serving the market;
- a set of institutions that serve the process of concluding and executing transactions market.
- A complex of technical equipment and equipment that ensure the functioning of the stock market
- System of insurance of risks in the stock market.

Taking into account various scientific interpretations, in our opinion, the stock market infrastructure is a complex of separate and independent systems and structures, which are the conditions for the effective functioning and availability of the stock market, operating under the stock exchange's law. We believe that the stock market infrastructure will be tied to our investment activity, so we need to improve the stock market infrastructure, taking into account the importance of sustainable development of the economy, increasing the living standards of the population.

In the economic literature there is no unified opinion on the number of elements included in the structure of the stock infrastructure. Or the composition of the elements is unclear: "The infrastructure of the securities

market ... includes legal, information, settlement and clearing, depository, trading and other components ...". [7] So, the author singled out two main approaches. According to the first approach, only organizations servicing the process of concluding and executing transactions are included in the structure of the stock market infrastructure, namely: regulating, trading, accounting and clearing and settlement institutions. This approach is followed by Y.Mirkin, highlighting the legal, information, registration, depository and settlement-clearing substructure as part of the infrastructure of the stock market. [9]

According to the second - the structure of the stock infrastructure includes not only trading and accounting organizations, but virtually all the institutions involved in the process of commodity circulation in the market: investment banks, collective (institutional) investors, financial intermediaries. Such an expanded interpretation of the composition of the stock infrastructure is held, in particular, by S.Tomlyanovich, V.Tarachev. [10] The author does not share this approach, considering the stock infrastructure as the only link that brings together sellers and securities buyers and investors in the stock market.

In the dissertation research the author structured the system of the infrastructure of the stock market, specified and systematized the elements entering into its structure.

The modern development of technologies related to the maintenance of the stock requires the expansion of the complex of market-serving spheres of activity, in which it is necessary to include insurance, innovation and technical support for the stock market. Thus, regardless of the stock market model, the modern form of organization of its infrastructure includes the following main elements:

- accounting infrastructure (registrar and depository);
- trading (exchange, over-the-counter and alternative);
- settlement and clearing (clearing and system of payment);
- Regulatory (state and self-regulatory);
- information (analytical, consulting, rating);
- insurance infrastructure;
- innovative infrastructure;
- Technical infrastructure.

The system of the stock market infrastructure can be described as a two-level system, the first level of which is an internal organizational environment that ensures the process of concluding and executing transactions on the basis of differentiation of functions and specialization of activities, the second one is the external subsystem servicing the internal infrastructure and ensuring its normal functioning.

This structuring of the infrastructure as a system of servicing market participants helps to identify the backbone (internal) infrastructure directly involved in the creation and organization of the market and the auxiliary (external) infrastructure, whose institutions provide professional participants with various services not directly related to commodity circulation in the stock market, but creating the conditions necessary for this process (development of software products and provision, research, insurance of individual Dov risks and transactions, preparation and selection of personnel, production of forms of securities, etc.).

Regulatory infrastructure is one of the forming systems, covering all participants of the stock market and ensuring the implementation of their activities in accordance with established rules. In its composition, the following main elements can be distinguished.

State regulatory bodies ensure the implementation and protection of investors' rights and freedom of activity of participants in the securities market in the framework of the rules provided for by the legislative and regulatory framework.

The participation of government agencies in the regulation of the stock market is a prerequisite for the financial security of the country, as international experience shows that this market is the most large-scale and risky. Particularly active control functions must be carried out at the initial stages of the formation and development of the market, since only the state can "launch" the market mechanism in a civilized and safe form.

In order to regulate the stock market, the authorized state bodies perform the following main functions:

- ideological and legislative (development of the concept of market development and the program for its implementation);
- concentration of resources for the creation of a market and its infrastructure;
- establishment of "rules of the game" for professional participants of the stock market (requirements for participants, operational and accounting standards);
- Control over financial stability and market security (supervision of the financial condition of investment institutions, monitoring compliance with legal and ethical standards);
- Creation of a system for disclosing information about the state of the market and its participants, ensuring information transparency;
- formation of a system for protecting investors against losses, including the creation of state or mixed schemes of investment insurance;

- prevention of negative impact on the stock market of monetary, currency, fiscal and tax policy instruments;
- Balanced development of all segments of the stock market.

In order to realize these functions, we need a stock market regulation system, which includes the following main instruments: the legal framework, certification of stock market specialists, licensing of professional participants, monitoring the functioning of the market and the application of sanctions for violations of the order of work on it.

The structure of the government agencies that regulate the stock market depends on the market model, the degree of centralization of management in the country and autonomous regions, as well as an existing 30-ies global trend of formation of independent organizations on securities.

Self-regulating organizations (SROs), established by professional participants in the stock market, play an important role in its functioning and regulation. The main functions of SROs are: providing professional working conditions for securities market participants, observing professional ethics standards, protecting the interests of securities owners, setting rules and standards for conducting securities transactions that ensure effective activity in the securities market.

Self-regulation of the securities market is carried out in all economically developed countries. In the world practice, self-regulatory organizations, as a rule, are business associations, voluntary associations that establish formal rules for their members to conduct business and carry out functions to supervise and regulate the market. Often, self-regulating organizations - this is a separate market, access to which is limited by the requirements for professionalism and ethics, the volume of trade and capital, financial condition, etc.

The legislative infrastructure includes the entire regulatory framework for the regulation of the stock market, built on a hierarchical basis. The highest normative act is the law that establishes the fundamental rules for the operation of the stock market. In Uzbekistan such a document is the Law of the Republic of Uzbekistan "On the Securities Market". [15] This law regulates the relations arising when the issuer issues securities and their circulation on the secondary market, establishes rules for the activities of professional participants in the stock market and determines the status and powers of the regulatory bodies.

The third level consists of instructions, methods, provisions developed by the participants of the stock market.

Only the availability of a legal framework at all three levels allows for the effective functioning of the market. The most important requirement, which the regulatory framework must meet, is lucidity, consistency, inadmissibility of double interpretation, compliance with the real needs of the market.

Ethics of the stock market includes the rules and principles of fair business, which concern not only the moral and professional qualities of the employees working in the market, but also the pricing mechanisms, disclosure, conflict resolution, financial responsibility.

The general principles and basic elements of building an ethical code include: general provisions and definitions, a description of the scope, principles of professional ethics, and internal standards for the activities of SRO members, as well as the responsibility of members of the self-regulatory organization and the procedure for imposing sanctions.

The development and observance of national ethical codes of professional conduct of participants in the stock markets creates the basis of a civilized market, characterized primarily by a low level of risk for both investors and issuers.

In general, the task of preparing detailed ethical requirements rests with self-regulating organizations and communities of professional participants in the securities market. By uniting professionals, these organizations ensure the promotion of qualification standards, as well as ethical norms, in accordance with the best international practice.

The trading infrastructure of the stock market is the coordinating element of the stock infrastructure. Trade organizers ensure the functioning of trading platforms on which securities sale and purchase transactions are concluded. Russian legislation defines the activities of trade organizers as "the provision of services directly contributing to the conclusion of civil law transactions with securities between participants in the stock market."

Exchange trading systems. Initially, the stock market was formed on the basis of exchange organizations. There was an establishment of separate stock exchanges or the organization of independent fund departments on existing commodity exchanges.

Stock exchanges, being historically the most important institution of the trade infrastructure and the condition for the existence and development of the stock market as a whole, carry out: the creation of a permanent market, the establishment of prices for stock assets, the provision and dissemination of financial information on transactions, quotations, stock indices, , development of rules, technologies and working methods in the market. The organizational structure of stock exchanges reflects the functions performed by exchanges.

In addition, stock exchanges are the normative centers of the securities market. The implementation of this

function is carried out depending on the choice of the model for building the national stock market.

The exchange market is characterized by high turnover, which allows creating a highly efficient infrastructure that can take on most of the risks and significantly accelerate transactions and reduce specific overhead costs. The payment for this is a strict standardization of the transaction, severe restrictions on the activities of market participants, increased obligations with regard to maintaining liquidity and reliability.

The organization of the exchange market, the information transparency of the exchange process, and the guarantee of the execution of the transaction, the openness and openness of exchange trading, the concentration of temporarily unoccupied resources, ensuring market liquidity, fair and fair pricing are among the inherent advantages of the stock exchange.

However, in spite of obvious advantages, stock exchanges experience sharp competition from over-the-counter markets and alternative trading systems.

OTC trading systems. In the developed national securities markets, the place and role of the over-the-counter sector is now quite clearly defined. In the sphere of OTC transactions, the overwhelming majority of primary placements fall, as well as the secondary circulation of securities that have not passed the listing of exchange trading systems, that is, they have lower investment qualities.

The stimulus to the development of the over-the-counter market was the growth of volume and the qualitative variety of securities. The giant over-the-counter market is one of the distinguishing features of the American stock market, the main activity of which is carried out within the framework of the Nasdaq trading system, which has existed since 1971. And ahead of the number of transactions in recent years, the New York Stock Exchange - NYSE. In most other developed countries, over-the-counter turnover takes a more modest place.

One of the main differences between the exchange and over-the-counter markets is the technology of making deals. On exchanges, the fact of concluding a deal is fixed in the central trading computer. In the over-the-counter market, there are several ways of making deals: verbally, by fax, on specialized electronic networks. In addition, the technology of confirmation and execution of transactions differs. If the transaction is concluded in the exchange system, the necessary stage of its execution is the determination of mutual obligations based on the results of trades, or clearing. On the OTC market, there is no counter-offsetting requirement, each transaction is executed separately from others in full accordance with the parameters with which it was concluded.

Despite the fact that the OTC market differs from the organized exchange by the increased level of risks for all participants, the regulation of rules, weak regulation, relative information closeness, volatility, and professionalism of intermediaries, significant results have recently been achieved in overcoming the negative features of over-the-counter trade. In particular, the control of risks, the regulation of professional activity, liquidity. Thus, the OTC market strives to acquire the features of the official market, approaching in its essence to the exchange one.

Alternative trading systems and Internet-trading. An impulse to create alternative trading systems (ATS) in the late 80's. 20c. became progress in the development of exchange technologies, technical means, a multiple increase in customer base and automation of broker-client relationships. The founders of the ATC were large brokerage companies (or their groups) and news agencies. The prerequisite for strengthening the ATS in the market was the lack of direct access to the liquid market and the high cost of services.

Initially, electronic trading systems (ECN), or electronic communication networks (EKS), were created as an environment for the processing and execution of limit orders that could not be executed on the exchange market. In the early 90's, there were first brokerage systems using ECN technologies.

Internet trading on financial markets began to develop at rapid rates only after the brokers introduced ECN technologies, which allow the client to operate on the market without the participation of a broker.

At present, the degree of penetration of electronic commerce into different market segments is not the same: the stronger the centralization and the higher liquidity of the market and, the more standardization of circulating securities and transactions, the greater the distribution of ATS. Therefore, in all developed countries, Internet trading has become most widespread in the markets of highly liquid shares and derivatives based on them, and the trade in medium- and low-liquid shares is carried out through ordinary brokers. In bond markets, the introduction of e-commerce technologies is much slower than in equity markets. This is primarily due to the fact that debt securities are much less homogeneous and differ among themselves in a significantly larger number of parameters (coupon size, maturity period, periodicity of payments, etc.) than equity.

Electronic trading systems drastically expanded the access of investors to the securities market by eliminating many physical, cost, geographical and time constraints. By allowing participants to conduct financial transactions and investments in the economies of different countries using minimal hardware and software resources, electronic trading systems contribute to the globalization and internationalization of financial markets.

However, with the advent of alternative trading systems, negative changes in the market are also associated:

first of all, market fragmentation, increasing its volatility, reducing transparency and protecting investors.

Settlement and clearing infrastructure. The main element of the system of settlements in the securities market and the central link in the entire transaction procedure is clearing. It is from the design of the system responsible for the clearing procedure that the efficiency of the securities market largely depends.

In accordance with Russian law, clearing activity is a definition of mutual obligations, which includes collection, reconciliation and adjustment of information on securities transactions and the preparation of accounting documents for them, as well as their offset for the supply of securities and settlements on them.

In different national systems, the clearing organizations, in addition to the securities market clearing procedure, carry out "adjacent" stages of the transaction: reconciliation, the performance of the functions of the depository, and the organization of cash settlements. For example, Clearstream Banking international clearing and clearing organizations [11,12] (Luxembourg, Germany, France) and the European settlement system Euroclear (Belgium, France, Netherlands) serve simultaneously as a clearing center, depository and settlement system.

The essence of clearing is a multilateral netting, in which there is an innovation in the market - replacing the original obligations that existed between market participants, arising from the transactions they concluded, with new ones that provide for a different way of execution. The main feature of the settlement –clearing process on the securities market is related to the process of re-registration of the sold security from one owner to another.

The need for clearing and settlement follows from the modern organization of market transactions. The existence of centralized clearing organizations greatly facilitates and speeds up the process of collecting the necessary information, conducting trade transactions and organizing settlements, significantly reduces the need for cash, enables the transfer of automated settlement activities. The clearing and settlement mechanism guarantees that in the event that one of the parties to the transaction is unable to fulfill its obligations, the clearing and settlement structure will assume the fulfillment of this obligation to the other party of this stock transaction. [13]

In the generalized form, the following main functions of clearing and settlements in the securities market can be distinguished:

- Accounting of registered transactions (by market type, participants, terms of execution, etc.);
- Performing calculations for registered transactions;
- offsetting mutual obligations and payments of participants in the stock market;
- Organization of cash settlements;
- ensuring the supply of an asset under a concluded transaction in the securities market;
- ensuring the process of registration of concluded exchange transactions (collection of information on concluded transactions, reconciliation and adjustment in case of discrepancies, confirmation of the transaction);
- Providing guarantees for the execution of concluded transactions.

Clearing and settlement transactions begin after the conclusion of the exchange transaction and include several stages in which the stock exchanges, banks, depositories, etc. take part.

The use of clearing as well as any element of the stock market infrastructure on the one hand leads to an increase in the efficiency of the entire system (speeding up and reducing the cost of settlements, optimizing the flow of securities and payments on them), but on the other hand it is a source of increasing systemic risk. The risk arises when one or several transactions are derailed (staff errors, infrastructure risks, etc.).

Clearing and settlements are carried out either by a legally independent organization (clearing house (settlement) chamber) or by a specialized structural division of the exchange or depository (see Appendices 4-6). Accounting infrastructure of the stock market.

In the course of its circulation on the market, a huge amount of securities, both paperless and classic documentary, is accounted for by a complex accounting infrastructure, including the following elements depending on national traditions, specific device and legislation features: depositories, custodians, registrars and transfer agents.

In accordance with Russian law, "depository activities are the provision of services for the storage of securities certificates and / or registration and transfer of rights to securities."

In today's market, where mostly uncertificated securities and securities with centralized custody are traded, depository activity is mainly the recording of rights and accounting for the transfer of rights to securities, i.e. making settlements on securities.

Registrar activities include "... the activities of keeping the registers of securities owners: collecting, fixing, processing, storing and submitting data to registered persons and issuers from the registry". [10]

The transfer agent may be a professional participant in the securities market who, in accordance with a contract with the registrar or the depository, accepts and transfers information and documents necessary for conducting transactions. The activities of specialized transfer agents are mainly aimed at providing courier

services to accounting institutions, which improves the information exchange between them, as well as their clients.

Due to the fact that securities were initially issued in documentary form, depositories appeared on the stock market before registrars. However, at present, the differences between depositories and registrars are largely conditional. They are united by a common duty - registration of ownership of securities. The main difference between depositories and registrars in terms of their functions is that the depositories mainly represent the interests of investors, and the registrars are securities emitters.

In many countries, the natural activity of depositories was the compilation of registers of owners of registered securities, which led to the death of registrars as such. Their functions are adopted by the depository system, which does the same quicker, cheaper, and more efficiently, and if it is not artificially not to protect registrars from competition, they are often unnecessary in the modern infrastructure of the stock market.

Information infrastructure of the stock market. For the effective functioning of the stock market, the completeness, reliability and timeliness of information about the parameters of market functioning, generated by some participants and consumed by others, is of great importance. Therefore, an important component of the stock market is the information infrastructure that provides the process of public disclosure and provision of information about the market and events that affect its functioning.

The information infrastructure includes specialized organizations that collect, store, analyze and provide information on the stock market situation (quotations, rates, and ratings), regulatory bodies, SROs, professional stock market participants, issuers and investors.

The main product of the information infrastructure of the stock market is: the actual information (composition, period of relevance, efficiency of updating, structuredness, reliability, completeness); transport information (information delivery technology and telecommunications systems); user tools for working with information (software products).

Insurance infrastructure of the stock market. The insurance system in the securities market should be viewed as a necessary element of the stock market infrastructure, which is one of the most highly risky segments of market relations. The possibilities of using insurance technologies allow minimizing the risks of professional participants of the stock market, contributing to the strengthening of financial stability and improving the economic security of their operating activities.

To reduce infrastructure risks and manage them around the world, the following methods are used: the services of specialized insurance companies, participation in compensation funds, and membership in mutual insurance societies (OVS).

The traditional way of insurance risks are the services of insurance companies. With the help of a professional insurer, you can manage many risks in the financial market. The problem is only the cost of insurance services and the costs of taking measures to prevent unforeseen events, which are often more expensive than insurance.

Another element of the insurance infrastructure and the reduction of risks for professional participants in the stock market are mutual insurance societies, the distinctive feature of which is that the contributions of its participants (members) in the insurance of various risks can be combined into one reserve. If necessary, by decision of the executive body of the Armed Forces, it is possible to separate the reserves for property insurance and liability of the participants. At this stage in the development of the market, only a limited number of participants can unite each OVS, between which there are stable relationships in terms of business, property relations, etc. Membership in a single self-regulatory organization can be considered as a necessary, but by no means sufficient condition for unification in the OVS.

Innovative infrastructure of the stock market. The basis of innovative infrastructure is formed by educational institutions: specialized educational institutions, corporate training systems, research institutes; personnel agencies, venture, engineering and consulting companies.

The labor market is closely connected with the stock market: thanks to the market mechanism of self-regulation, it tracks the directions of financial flows in the economy. For any change of trends in the serviced markets, the demand for specialists of a particular profile inevitably follows.

The need for specialists is being supplemented with the help of infrastructure institutions that provide training, training and retraining of personnel and providing recruitment services.

The infrastructure of training and selection includes the following elements:

- Institutions providing training, retraining and recruitment;
- Methodological support (programs, teaching aids, exam questions);
- Technological support (technology of training: courses, conferences, seminars, attestations, etc.)

Due to the fact that the maintenance of own personnel services by participants in the stock market is expensive and often unprofitable, institutions are being formed that take on the responsibility of providing companies with qualified personnel. The activity of recruitment agencies specializing in this type of activity and

using highly efficient technologies is characterized by a wide range of services and diversification of activities: from personnel consulting to training.

Consulting companies specialize in establishing business ties, developing feasibility studies for newly established firms, consulting on planning activities, and financial evaluation of enterprises and analysis of their current activities.

Technical infrastructure of the stock market. The development of technical infrastructure, the main subjects of which are software developers, telecommunication companies, and specialized organizations for the production of forms of securities and office equipment, significantly increases not only the level of market development, which affects the quality and efficiency of work on it, but and investment quality of securities.

The considered composition of the infrastructure elements is determined by their need in the market and depends on the following factors: the model of the stock market, the economic potential of the country and the tasks being solved by the state in this or that period.

In different countries, the development of the stock market had its own peculiarities, which predetermined the nature and model of the formation of its infrastructure.

4. FEATURES OF THE EVOLUTIONARY AND TRANSFORMATIONAL (REVOLUTIONARY) DEVELOPMENT OF THE INFRASTRUCTURE OF THE STOCK MARKET

According to the study, in the process of evolution of the stock market infrastructure, three main stages can be distinguished, the periodization of which is based on the criteria for the species characteristics of the circulating securities and the level of technological development of the market.

At the first stage (12-17 centuries), the emergence of the debt securities market and its infrastructure in the development of trade and usurious relations. Both types of activity are the ancestors of the first securities - bills of exchange and bills of lading. For this stage of the origin of the infrastructure, the initial allocation of functions to provide additional or ancillary services as part of the circulation of securities was characteristic.

The second stage (18-20 centuries) is associated with the rapid development of the equity securities market of joint-stock companies and, as a result, the formation of a specialized infrastructure for the corporate securities market to service their circulation. A feature of the second stage was the further expansion of the scale of the stock market infrastructure that occurred as a result of the allocation of production of these services to specialized institutions. The directional specialization and the correctly chosen structure of the isolated services in the stock market helped to reduce the overall cost level of its participants, and led to the stable operation of infrastructure institutions and a sufficiently strong competitive position in the market. So in the system of infrastructure of the stock market, trading, accounting, settlement, information and regulatory substructures were formed.

The third stage of development of the stock market infrastructure (late 20th - early 21st centuries) was marked by a technological revolution that initiated the processes of globalization and integration of world stock markets, the modification and transformation of their mechanisms and structures.

The process of development of the stock market and its infrastructure occurred according to the type of complication of existing mechanisms and structures. Thus, as market capitalization increased, more and more participants and new types of securities emerged, there was an objective need to isolate certain types of services in the market on the basis of specialization and concentration, which led to the formation of new institutions and structures.

Qualitative changes, during which the roles of participants and regulating bodies were modified, contributed to the gradual improvement of the process of securities circulation, significant cost reduction, pricing and market liquidity growth. Thus, a significant increase in the capitalization of the world stock market in the early 20th century. (£ 32.6 billion, of which 24% is the United Kingdom, 21% - the United States, 18% - France, 16% -Germany, 5% -Russia), has become a factor in the qualitative leap in the development of its infrastructure. Moving the world's securities trading center to New York, when the annual volume of transactions on the NYSE in 1929, reached \$ 1 billion, has changed the level of development of the infrastructure of the American market. [14]

A new phase of rapid development of world stock markets began in the 50s, when the turnover on the world's largest stock exchanges reached the pre-war level and continued to grow rapidly, resulting in a second qualitative leap in the development of the world stock market and its infrastructure. This is primarily the emergence of an electronic form of trading in securities and the organization of large electronic trading systems, such as the American Association of Securities Dealers (NASDAQ), established in 1971, the National Association of Securities Dealers Automated Quotations system.

With the development in the 1980s of new information and telecommunication technologies, the emergence of alternative trading systems on the market, which constitute a serious competition to traditional exchanges and

over-the-counter trading systems, is associated.

The introduction of new technologies has become a powerful economic factor, the revolutionary influence of which has led to a change in the technology of trade, as well as to fundamental structural changes in the market itself. As a result, new infrastructure elements appeared and the existing ones began to be modified.

The infrastructure of the stock market becomes more complicated as necessary for the appearance of new elements in accordance with the development of the system as a whole. And the complexity of the organization of the infrastructure is determined by the complexity of the system of the stock market. If the infrastructure lags behind the very structure of the market, it becomes a brake and leads to insufficient development of the structure. While the number of transactions is small and the market turnover is small, the maintenance of infrastructure is expensive, so it remains at a primitive level. In particular, the search for a partner in a transaction is random, there are practically no guarantees of the transaction. The critical moment is the possibility, through the standardization of individual stages in the purchase and sale of securities and the transition to "mass production", to reduce relative transaction costs so that this type of activity is able to finance itself at the expense of the parties to the transaction.

In the costs of the parties, in addition to direct costs (for the search for a partner, execution of documents, etc.), there are also indirect ones that are realized in risks, i.e. in the possibility of losses as a result of incorrect execution of the transaction. These risks are assumed by the market infrastructure, for which purpose its separate elements are created.

5. CONCLUSION

Stock infrastructure is a complex self-organizing system that includes a set of institutions that serve economic entities in the process of securities circulation, and a set of technologies through which the stock market operates. The infrastructure of the stock market includes a number of elements grouped according to a functional feature and the corresponding two-level organization: I - the internal infrastructure is a backbone, creating conditions for circulation of securities in the stock market and contains regulatory, trading, accounting, clearing and information infrastructures; II - the external infrastructure ensures the functioning of the elements of the first level and includes insurance, innovation and technical infrastructure.

Analysis of the evolution of the elements of the stock infrastructure, allowed the author to identify the following features.

1. Development of the stock infrastructure in the period from 12 to 19 centuries had a catching-up character with respect to the market. That is, the development of the market took place in such a way that the requirements were formed first, and then the opportunities for the emergence of new types of activities, institutions and structures serving this market appeared. The driving force behind such a process, both in the stock market and all others, was the social division of labor.
2. The peculiarity of the development of the stock infrastructure since the 20th century was the change in its development trend relative to the market: the overtaking character of development replaced the overtaking character of development. Thus, the prerequisite for the qualitative development of the stock market was the outstripping development of its infrastructure.

Considering the evolutionary path of development of the securities market, the process of the appearance of new structural elements appears as an objective necessity, as the emerging need of a growing market. Formation and development of the market is ensured by the timely occurrence of the elements necessary for its further development. As for the countries in transition, whose stock markets were being created again, the formation of markets was on a revolutionary path, taking into account the existing world experience, on the basis of existing models.

Nevertheless, the trend of different-speed development of the domestic stock infrastructure in the process of the revolutionary creation corresponds to the world trend of its evolutionary formation, according to which the catching up occurs at the stage of the stock market formation, and, as the turnover and the spectrum of securities expand, the advanced development of the stock infrastructure.

Although, in the opinion of the author, in the creation of such markets it is expedient to first form the basis - the framework that would ensure the launch of the market mechanism and the further maintenance of its work, that is, it was necessary to create conditions for the outstripping development of its infrastructure.

In addition, in the early stages of the development of the securities market, there are many risks that the developing infrastructure takes on: the risk of default by the counterparty; risk of security of securities; risks associated with the opacity of the market and the lack of reliable information about issuers, transactions, prices, etc. ; risks of price manipulation; risk of cash settlements, etc.

In order to create the infrastructure for the formation, development and efficient functioning of the stock market, it is necessary to solve a number of problems that are reduced to two main groups:

- Risk management in the securities market;
- Reducing the unit cost of operations (economies of scale).

In the domestic stock market, during its formation and development, almost all types of risks were present, which are inherent in the very market of a country with a transition economy (political, macroeconomic, sectorial, legislative changes, etc.) and risks inherent in the process of investing in securities that can be reduced if the infrastructure of the stock market is effectively developed.

As a result of a comprehensive study of the stock market conducted on the basis of a systematic approach, the author defined and structured the stock infrastructure, which included the internal (system-forming) and external (auxiliary) components.

The author has specified the composition of the elements of the modern stock infrastructure, which irrespective of the model of the stock market includes: regulative, trade, accounting, settlement and clearing, information, insurance, innovation and technical subsystems.

The historical-genesis analysis carried out allowed the author to conclude that throughout the process of evolution of the stock infrastructure, the trend of its development relative to the market changed twice: in the period from the 12th to the 19th centuries, the development of the stock infrastructure had a catching-up character with respect to the market, (that is, first the needs were formed, and then the opportunities for the emergence of new types of activities, institutions and structures serving this market on the basis of directed specialization and division of labor appeared). Since the 80's, 20th century, the trend of development of the fund infrastructure in relation to the market has changed: the catch-up development has been replaced by the outstripping one. Thus, the prerequisite for the effective development of the stock market was the outstripping development of its infrastructure.

The comparative analysis of the existing American and German models of stock markets in the world made it possible to characterize the model of the infrastructure of the domestic stock market formed during the transformation of the domestic economy as mixed and to assess the degree of possible influence of world models on its further formation.

The second chapter of this work is devoted to the study of the formation and development of the infrastructure of the domestic stock market, the specifics of the formation and functioning of its elements.

REFERENCES:

- [1]. Karenov RS Terminology of market economy and business. Almaty: Gylym.-1994.-P.133.
- [2]. Mukhanova E.B. Theoretical bases and ways of formation of market infrastructure. M.-1994.-P.5.
- [3]. Muftiev G.G. The market of means of production in the system of regional economy. M.: Science. 1993.-With. 167.
- [4]. Novikov B.A. Explanatory dictionary: terms of market economy. M.: Nauka, 1994. P.75.
- [5]. Belyavsky I.K. Statistics of the market of goods and services. M.: Finance and Statistics.1995.-P.364.
- [6]. The securities market: Textbook / ed. V.A. Galanova, A.I. Basova.-M.: FiTS.-1996.-P.100.
- [7]. Sizov Yu.S. Formation of the system of state regulation of the securities market in Russia. Moscow experience. Moscow: Planet 2000.-1999.-C.142.
- [8]. Ovchinnikov V.V. The path to perfection of the global securities market: Global custody.-M.-1998.-C.488.
- [9]. Mirkin I.M. Securities and the stock market. Moscow: Perspektiva.-1995.-P.324.
- [10]. Tomlyanovich S. Investment risk management and development of the stock market infrastructure in Russia // Securities market.-1999.-No.14., Tarachev V.A. A few words about the derivatives market // Securities market. - 2003, - No. 19.
- [11]. Golitsin Yu. The stock market of pre-revolutionary Russia. - Moscow: Delovoi Express, 1998.-P.88.
- [12]. Bobrov D. Eurobonds - as it was done on RTS // Securities market, - 2002, - №16.
- [13]. The securities market / N.T. Kleshchev, AA Fedulov, VA Simonov and others; Ed. N.T. Kleshcheva, - M.: OJSC "Izd-Veto-Economics" - 1997.-P.318-319.
- [14]. Mertens A.V. Investments: A course of lectures on modern financial theory. -K.: Kiev Investment Agency, 1997.-P.58-59.
- [15]. Law of the Republic of Uzbekistan "On the securities market". 06/03/2015 N ZRU-387.www.lex.uz.