

**MINISTRY OF HIGHER AND SECONDARY SPECIAL EDUCATION OF  
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**THE PERSPECTIVES OF DEVELOPMENT OF SECURITIES MARKET  
IN UZBEKISTAN**

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## INTRODUCTION

**Subject urgency:** Securities market is the most important sector of economy. Satisfactory pace of economic growth in any economy is critically dependent on availability of adequate capital resource. A well-developed securities market, while acting as a provider of funding for economic activity at the macro level, plays specific roles in an economy. Such as it spreads stress on the banking sector by diversifying credit risk across the economy, supplies funds for long-term investment needs of the corporate sector, provides market-based sources of funds for meeting the government's financing expenditures, provides products with the flexibility to meet the specific needs of investors and borrowers, and distributes capital more efficiently and fast.

The main impulse for developing securities markets includes both the equity and debt segments. It mainly depends on specific history of particular country, specifically in the context of the financial system development. It relates to creating more complete financial markets, transforming local savings into investments, preventing banks from taking on excessive credit, growing real GDP by capita, risk diversification in the financial system, financing government debt, increasing the scope for foreign financing, conducting monetary policy, and providing a range of long-term and short-term assets.

Privatization in Uzbekistan began after gaining independence in 1991 and is underway currently, aiming to reduce the number of state owned enterprises and increase the share of private sector. These are main steps towards development of securities market. As mentioned above stock market is main source of supplementary capital flow to the enterprises, government and individuals. Role of each participant differs widely private companies and banks aim to raise extra capital, government participates in securities market in order to cover its budget deficit individuals also take part to get extra profit.

Developed countries have well developed stock market-allowing free flow of capital through economic sectors. Determinants showing degree of development in advanced stock markets are very high. By contrary in emerging markets, these

indices are below 50%. Estimating such indicators illustrate big picture of stock market development.

Stock market development does not solely rely on its performance, but other external factors like banking sector development, rate of investment and savings, macroeconomic stability, real interest rate etc. Relationship between these factors is quite different some factors affect directly to the stock market and vice versa.

Stock markets are a mechanism through which risk is transferred and diversified allowing firms to reveal capital for new investments. Risk transfer and pricing mechanisms in the market allow financial institutions, such as banks and insurance companies, to manage risk more efficiently; and markets work as a buffer to complement banking system and therefore contribute to financial stability. The more efficient markets are, the better these outcomes are achieved and the greater the contribution to the economy. We can infer that this complete system also needs regulation upon it. Government uses variety of tools to control the securities market as monetary policy, regulating issuers, market infrastructure, investors and investment process.

Developing stock markets are important for our economy as it allows free flow of capital through financial and economic intermediaries, diversification of risk exposure, transformation of savings into investment, financing government debt and economic growth.

**Objective:** stock markets and their performance are objective of this work.

**Literature review:** Information on the research is available in books, journals, research papers, conference materials, newspaper articles, statistical data, websites of Uzbekistan Stock Exchange and authorized regulatory bodies, World Bank and other international financial organizations, by authors Sh.Shokhazamiy, I.Butikov, V.A Galanov, E.F Jukov Charles Amo Yartey, Valeriano Garcia, Anna Carvajal, Jennifer Elliott, Suresh A.S, and others.

**Made decisions and proposals.** Main aim of this work is to explain stock markets and its role in economy. Many theories about stock markets and its development perspectives exist in world economy. This work tries to explore the

perspectives of stock market development. At the same time, it tries to explain state of stock market in Uzbekistan. During the work, following tasks are set:

- explore phenomenon of stock market and relationship between stock market development and economic growth;

- explaining structure of stock markets and its role in financial markets;

- indicating available types of securities in stock markets;

- available types of securities market regulation in both developed and emerging markets;

- describe technical and fundamental analysis as estimation of price movements;

- understanding relationship between macroeconomic determinants and securities market development;

- analyzing performance of “Tashkent” RSE to make assumptions about stock market development;

- evaluating quantity and quality of stock market development

**Scientific and practical value:** Conclusions and assumptions made in this work can be theoretical basis for developing and strengthening securities market, recommending possible solutions to existing problems related to securities and its turnover, introducing methods and principles used in developed countries to improve condition of stock markets.

**Theoretical and methodological basis of work.** Internationally admitted scientific books, thesis and speeches of President of Uzbekistan Islam Karimov related to the development of economy of country. Furthermore, laws adopted at Oliy Majlis, Presidential decrees, provisions of Cabinet of Ministers, normative legal acts adopted by Ministry of Finance, Central bank of Uzbekistan and scientific materials and articles published at different Journals and newspapers.

**Composition of work:** This work contains introduction, three separate parts, conclusion and bibliography. Tables and figures are used to better illustrate the work.

## **Part I. SECURITIES MARKET AND ECONOMIC GROWTH: THEORETICAL ISSUES**

### **1.1 Securities market: participants, structure and economic growth**

Modern market economy urges each entity to look for either additional internal or external capital to finance its needs, improve its market value, and strengthen its position among competitors. Internal source of capital can be obtained easily but cannot supply all the necessities of the company. In such cases, entity addresses external capital resources from other participants of economy such as banks, partners, government and financial markets.

Securities market is a segment of financial market where variety of securities are bought and sold between participants of the market. These relations are conducted according to law of supply and demand among members of securities market. Stock markets as well as banks and insurance companies accumulate capital from government, individuals and firms to transform it into investments. Then investments are directed to spheres lacking financial resources. Hence, securities market is used to attract new capital, transfer real assets to financial assets, determine price, which will balance demand and supply and provide a resources to invest money both short and long terms. As independent segment of financial sphere stock market have its participants and formed structure.

The participants in securities markets include savers and various financial institutions. Some of these institutions own large amounts of securities, some take part by issuing securities, some assist people and firms in trading securities, and provide information and consultancy services.

Individual citizens participating in securities market as investors called individual owners. Individual investors mainly channel their savings into investment. They participate in order to make profit as dividend or percentage and tend to make profit between buying and selling prices of securities, participate in corporate control of particular firm by owning majority of equities.

Firms, which hold securities in inventory, trade for themselves or help others trade are known as securities firms. These firms include mutual funds, hedge

funds, brokers and dealers, and investment banks. In our financial system, hedge and mutual funds do not exist. Brokers and dealers are firms that help securities markets commit its functions. Brokers buy and sell securities for others. Dealers buy securities for their own account and earn a profit by selling at a higher price. Dealers usually trade on certain kinds of securities, and hold inventories of these securities and serve as market makers.

In addition, several other types of financial institutions play important role in securities markets because they purchase, sell large amounts of stocks and bonds or play as an intermediary. These include insurance companies, commercial banks, pension funds and investment funds. Banks play important role among other financial institutions. Banks have more advantages than other institutions as they own huge resource, have appropriate information about financial conditions of all firms of particular country, professional employees work for the banks and own efficient source of financing. Moreover, insurance companies own high potential of financial funds as insurance system is known as fast and efficient mechanism of accumulating financial resources.

Investors, issuers and financial institutions participate in two types of markets. After issuing securities, companies become joint stock companies and address to primary market where recently issued securities are traded and called initial public offering or IPO. In practice, shares are not usually offered directly to individuals. Upon issuance of securities, formal document called prospectus is prepared. It gives details about the stock being offered and its nominal price, along with information about the company. Banks help companies prepare the prospectus. Firms sometimes issue additional shares of stock in order to raise funds for investment. In addition, they can issue bonds to borrow money to cover its needs. Additional offering of shares and bonds are also underwritten by banks.

Underwriting activity should be conducted by commercial banks that have license issued by Central Bank of Uzbekistan. Underwriting activity involves forming optimal structure of offered securities, presenting investment prospectus to potential investors, providing research on the firm and ensuring that its securities

are reasonably priced and guaranteed placement of securities in stock markets. In practice, companies rely on the reputation of investment banks even they do not bother about status of the issuer. Because of strong reputation, underwriting activity of the investment banks showed tremendous increase in the last two decades that more than half of the issued securities throughout the world were underwritten by 10 famous investment banks.

The initial buyers of securities often resell them in secondary markets, where the securities are usually traded continually among institutions and individual owners. Brokers help facilitate trading for individuals in exchanges and over-the-counter or OTC markets. For example, a person who wants to buy shares of a particular stock must first contact a broker by phoning or massaging internet based ordering system, indicating type of order as limit, market or a day order. Besides identification and account numbers are also provided by customer contacting a broker.

The broker fills the order either at an exchange or OTC markets. Exchange is a physical location where brokers and dealers meet to trade. Brokerage firms have seats on the exchange that allow them to trade. Brokers and dealers are specialist in trading securities. Orders are matched according to supply that is broker or dealer who wants to sell and demand specialist who wants to buy securities at certain price.

The broker may fill order by buying or selling stock at a secondary market that has no physical location, known as an over-the-counter market. One type of OTC market is a dealer market in which all trades are arranged by dealers via a computer network connecting dealers, brokers, and other financial institutions. Dealers usually post bid and ask price along with the size and type of securities offered.

Dealers earn profit called spread which is discrepancy between bid and ask price. The size of this spread differs significantly across securities, with smaller spreads for more liquid securities that have many buyers and sellers and are thus easier to trade. Government securities as short-term bonds, long-term bonds and

treasury securities have the smallest spreads, stocks have larger spreads, and corporate bonds have highest spreads. The reason for such high spreads on some corporate bonds is that these bonds are not traded frequently, so it may take a while to resell them. A dealer purchasing such a bond has to take the risk that its price might fall before it can be resold. The bid-ask spread helps the dealer compensate the risk.

In practice, buyers and sellers usually do not meet to arrange trades and it is not quite simple to facilitate trade among participants who is not aware of each other. Correspondingly, there is matter of time that directly affects the trades. Three main forms of market organization enable the actual trade of securities. They are an auction market, a brokered market, and a dealer market. They differ from each other in organization of trade.

The core feature of an auction market is that buyers and sellers meet each other directly to bargain over price. An auctioneer reads bid and offer prices tendered by potential while buyers and sellers are trading directly. The specific rules of the auction determine precisely how buyers and sellers are coordinated. For example, there can be a single trade between all buyers and sellers at a single price or a series of trades at different prices. Under all conditions, the key characteristic of the auction is that orders are centralized, so that the highest and lowest offers are exposed to each other. This table shows how auction is organized.

**Table 1**

**NYSE Arca auctions table<sup>1</sup>**

Entry time	Buy limit orders	Sell limit orders	Order price	Match able volume	Imbalance	Indicative match price
3:31	1000		\$19.00	0	1000	\$19.00
3:38		1000	\$18.00	1000	0	\$18.50
3:53	1000		\$20.00	1000	1000	\$19.00
3:56		1000	\$19.00	2000	0	\$19.00

<sup>1</sup> Source: [www.nyse.com/auctions](http://www.nyse.com/auctions) (Official website of New York stock exchange)

Previous closing price was \$18.50. Start date 14.02.2016, 3:3pm New York City time. Entry times are shown at first column. Second column displays offered buy limit orders, third sell limit orders, fourth order prices, etc. If we try to read first row that buyers ordered 1000 at \$19.00, but no sell offer is made so imbalance occurred. These processes took place until 2000 orders matched at \$19.00.

In practice, two types of auctions are used in exchanges as English auction and Dutch auction. They differ from each other by formation of equilibrium price, one means auction is preceded until high price is formed, latter form trades continue until the lowest price is achieved. The most well-known auction market is the New York Stock Exchange, where auctions for individual securities take place at specific locations, called posts, on the floor of the exchange. The auctioneer in this case is the specialist who is designated by the exchange to represent as an agent orders offered by certain clients. Today auctions are organized in automated, telephone based or face-to-face forms. Automated form of auctions means to reduce additional useless expenses.

Brokered Market-customers are generally not aware of currently trades and they hire a broker to buy certain types of specific company. A seller of securities may ask a broker to show the securities to potential buyers or a buyer may ask a broker to discover potential sellers. The broker provides information about potential buyers and sellers to earn a commission for their service. They act in trading at exchanges on behalf of their clients and introduce their clients to automated trading systems.

Brokered market has several advantages than other market structures. Brokers easily overcome settlement and clearing costs, can discover potential dealers faster than their clients do, have unlimited right to access exchanges and OTC markets, can represent orders of customers better than clients do. Traders at stock markets do not perform usually efficient, because of volatility and potential risks. In practice most brokers are well informed about price movements in the future, hiring them for trading can diminish former problems.

Dealer is a person who buys securities for their own account. They sell securities when price rises significantly and buys as prices go down. Dealers commit capital to the process of bringing buyers and sellers together and accept the risk of price fluctuations in the securities they hold. Dealers expect to earn a profit, because they always quote a bid price below their offer price. Most important factor of earning high profit is useful information. Dealers face risk when they are not aware of adequate information. When dealer make loss in trading they tend to increase offer price and decrease bid price to compensate the losses. Dealers offer variety of securities from common shares to derivative contracts. Physically, dealer trade either on the floor of exchanges or separate office. At the same time, they appear on automated systems.

There are generally many dealers in securities market. They are linked together either by telephone or by computer system. In fact, many over-the counter stocks are traded in automated electronic stock markets such as NASDAQ (National Association of Securities Dealers Automated Quotation system), SESDAQ (Singapore Stock Exchange Dealing and Automated Quotation System), XETRA (Electronic system of England and Germany) and “EL SIS-SAVDO” (Automated electronic stock market of Uzbekistan). In fact, first automated electronic system of Uzbekistan EL SIS-SAVDO was established in 1 June 1998. It gives chance to any citizen of Uzbekistan trade in stock market without any brokers and auctioneers. There are dealers who trade securities of national joint stock companies and post prices to potential buyers.

Securities markets play a crucial role in economic growth and financial stability. The main purpose of securities markets is to functioning as a mechanism for the transformation of savings into investment for the real sector, hence serving as an alternative to bank financing. Markets are best mechanism of asset pricing as well as a mechanism through which risk is transmitted and risk exposure diversified allowing firms to reveal capital for new investments. Risk transfer and pricing mechanisms in the market allow financial institutions, such as banks and insurance companies, to manage risk more efficiently. Markets may consequently

work as a buffer for disruption of bank dominated financing system and enable free flow of capital. The more efficient markets are, the better results are attained and the greater the influence on the economy.

In theory, stock market provides with guaranteed and efficient use of assets for corporations. Corporation management tries to increase firm value. In this case, securities market serves as method of maximizing value of the firm. If firm cannot benefit from securities market, precisely another firm takes control of the firm and makes profit. Securities markets create more advantages than real sector itself. It helps to generate more profit because of well-organized financial management at the same time rewards managers for their success.

There is positive relationship between securities market and economic growth. Some assume that economic growth is a result of effective stock markets, as mentioned above securities market increases quantity and quality of investment. However, some argue that economic growth ensures development of securities market. Developed macroeconomic conditions create sustainable growth for securities market. As we know, efficient market creates best mechanism for transforming savings into investment. The more investment is channeled to economy the more gains are achieved. Stock markets positively influence growth of GDP and decreases credit dependence. Transparency and accountability reflects financial liberalization of securities market, as a result it reduces potential risk and adverse selection. These increases tend to decrease the cost of borrowing in securities markets, which increase the liquidity, and the scope of the market.

## **1.2 Types of securities traded in stock markets**

Equity is a claim of share on the company's assets and earned profits. Both shares and equity means the same thing. Its owner owns one part of the capital of the company, which has issued the shares in demand. An owner of share has holding and voting rights. Holding rights mean holder of equities has a share what company owns and earns. Voting rights allow the shareholder the right to attend at the decision-making in the company. If the company makes profit, the owners of

shares receive dividends. The shareholders at a General Meeting of the Shareholders decide amount of profit transmitted to dividends.

Initially shares were issued in paper form, claiming ownership of company's assets. These days shares are not issued in paper-based form, because it took long time and expenses to trade. Formerly, when people who wanted to sell their shares, physically took the paper-based shares (certificates) to the brokerage. Today, trading with dematerialized form of shares became even easier to trade. Shares are kept safe and registered in depositories, which are an independent institution of securities market.

Conversely, issuing stock is called equity financing. Stock issuing is useful for the company, as it does not require withdraw money to creditors or pay back interest payments. Owners of shares expect company to get profit and their money comes back with additional return. In theory there are two types of shares exist. Common shares or ordinary shares represent ownership in a company and getting dividends on a proportion of profit. Investors have one vote per share to elect the board members, who supervise the most important decisions made by management. Common stock yields higher return over a period from each investment project. Common stock exposes most risk but higher return comes from it. If company goes bankruptcy, the ordinary shareholders will not receive money back unless company repays debts taken by creditors, bondholders and other liabilities upon government.

Preferred stock represents some degree of ownership in a company but shareholders do not have voting rights. These types of shares are issued in limited number only 20% of all shares offered. With preferred shares, investors are usually guaranteed a fixed dividend endlessly. Amount of dividend allocated to common stock shareholders can be changeable due to profit, but dividend rate of preferred share is determined at issuance. When company liquidates or goes bankruptcy preferred stock shareholders are paid off right after bondholders. In practice preferred shares are more stable than ordinary shares, thus it is close to the bonds.

Preferred shares have less volatility, their price usually stay constant or changes due to market changes. There are some types of preferred shares:

Cumulative shares-dividend is accumulated when company does not have enough profit to pay back. Amount of dividend is paid next consecutive years.

Non-cumulative shares-if company is unable to pay dividend, it is not accumulated and will not be paid until company gets profit.

Participating shares-participating preference shares get fixed dividend together with have right to get a share in the profit of the company.

Convertible shares-this type of shares can be converted into ordinary shares together with earning fixed income.

Redeemable shares-redeemable preference shares can be redeemed at the option of the company at a fixed rate either on a specified date or over a certain period. Other shares have unlimited duration, but in this type duration is indicated. The conditions for implementation of redemption are set in the issuance agreements. It should be pointed out that in the event that only the issuer has the right of redemption, this has to be exercised as of three years from the date of the issuance of the shares.

Non-voting shares-these involve the same rights as common shares, except for voting rights. It has the right to a minimum dividend-fixed or variable is conferred, furthermore that distributed for ordinary shares. This minimum guaranteed dividend is preferential as it is paid before the ordinary dividend and is accumulative. If it cannot be paid this year, it will be paid within the following five years. This type of share is rare in practice.

Companies can be either listed or unlisted in stock exchanges. Companies whose shares are listed on stock markets fulfill a series of requirements that tend to guarantee their liquidity, although, clearly, there are important differences between the shares of some companies and those of others. This means that in general the shares can be sold at any time, that there is an objective market price and that the investor is not obliged to seek a buyer for his shares as the market instantly provides these counter parties. These are all advantages for the investor, benefits

that are not enjoyed by the shares of unlisted companies. A company that wants to be listed has to meet a series of requirements. The procedure varies according to whether the shares are national or foreign ones, traded in the main or secondary market, etc.

Once a company's shares have been admitted for listing, the company is subject to the whole regime of requirements for admission, trading, permanence and exclusion. It is also subject to rules that oblige them to communicate significant shareholdings, provide regular public information and significant events. Exchanges set series of listing requirements for companies, banks, investment funds and other financial institutes. Listing requirements include minimum share capital requisite, number of issued shares and shareholders, operating with profit and amount of company assets. Companies that do not cope with listing requirements will be delisted.

Bond is an example of debt-based securities that means debt relationship between two parties. Bond is a kind of long-term debt security that the issuer makes certain payments of interest over a particular period in the future and pays off a fixed amount at maturity. Unlike shares, bonds do not indicate ownership on it. When purchasing a bond, you have no right to participate in the company's decision-making but are entitled to the repayment of the principal and the interest. There are several ways of repayment as the companies may decide upon the principal be paid in regular annual payments or on the maturity of bonds. When company goes bankruptcy debt upon bondholders is repaid at first. Some types of bonds exist in economy. They differ from each other by interest payment, maturity conditions, risk, and convertibility to other securities.

Corporate Bonds are types of bonds, which are issued by companies to cover its needs. It is equivalent to bank lending and other debt based relations. Among other bonds this is one of securities have high return and interest. Companies rarely issue these bonds, as it requires company to return with higher interest. In Uzbekistan by law, it is allowed to issue bonds after satisfying all liabilities upon creditors, preferred and ordinary shareholders. Allowed amount of corporate bonds

should be equal to 20% of share capital. In general, short-term corporate bonds have a maturity less than 5 years, intermediate have five to twelve years and long-term bonds have more than 12 years. At the same time, corporate bonds have higher risk exposure but larger yields.

Uzbekistan has a bank-dominated financial system, which mainly supply short-term resources to small business and companies. This is acceptable in short run but companies are likely to need long-term resources to cover their expenses. Therefore, Uzbekistan's corporate sector requires long-term financial resources to supply their expenditures. Development of the corporate bond financing would play a strategic role in the future.

Government bonds mean credit relations between government and citizens. Government accumulates savings of individuals and gives claim, showing liability of the government until specific period. These types of bonds are used to cover budget deficit. Government bonds have less risk exposure thus yield is also low. Using government bonds have several advantages as they can be used as tool of defeating inflation and decreasing money supply. Most conservative investors prefer government bonds because of the government guarantee.

Municipal bonds are frequently used in developed markets by municipalities to cover their expenses. They also offer low yields so less exposure to risk. Interest payments are made from taxes and other revenues.

Convertible bonds can be converted into common stocks. If company decides to issue stock, the market usually interprets this as a sign that the company's share price is overvalued. The company may choose to issue convertible bonds letting bondholders to convert their bonds to ordinary shares. This avoids bad impression and company continues working well. It tends to offer lower rate of return.

In conclusion, bonds are a crucial mechanism for creating and supporting companies, investment, and economic growth. As for government bonds, they help to finance its budget deficit and provide stable source for specified period. Bonds effectively can replace dependence on bank financing. In the future bonds may play important role in our economy as means of financing.

Derivative securities mean financial contracts the value of which is derived from underlying assets or underlying contracts. Several assets can be used as underlying assets such as equities, debt based securities, equity index, foreign currencies, commodities, raw materials, and other derivatives. Depending on the types of underlying, the values of the derivative contracts can be derived from the corresponding equity prices, interest rates, exchange rates, commodity and raw materials prices. Derivatives allow holders effectively protect their position from risks related to price fluctuations of underlying assets. In other words, holders of derivatives hedge against price, interest rate, equity and commodity price fluctuations in exchange. Generally, derivative operations involve transferring risks to participants, who are willing to defeat, from who are not willing to do so. Derivative transactions are now commonly used among, commercial and investment banks, central banks, insurance companies, investment funds and large corporations. Derivatives are also used between countries to defeat against price fluctuations.

There are four main types of derivatives contracts: forwards; futures, options and swaps.

Forward contract is a contract to buy or sell a specified amount of security, commodity, currency, or other financial instrument at a certain date in the future. The price is set at the time when contract is made. Forward contracts are not traded in exchanges, but in OTC markets. Unlike other derivatives, they are heavily regulated and only involve two parties.

Futures contract is type of contract to buy or sell a specified quantity of an asset at a specified price with delivery at a specified date in the future. Futures contracts are standardized and traded on well-organized stock markets. Futures are settled through established clearinghouses. Participants trading futures can realize gains and losses on a daily basis and results are settled in cash at the end of trading day.

Options contracts give an owner the right but not the obligation to buy or sell specified amount at identified price. Options contracts can be either standardized

or customized. There are two types of option call and put options. Call option contracts give the client the right to buy a specified amount of a commodity or financial asset at a specific price on or before a certain future date. Similarly, put option contracts give the buyer the right to sell a specified amount of an asset at a certain price on a before a prearranged future date.

Besides, American style option, which can be sold before specified time. By contrast, European style option can only be exercised on the expiration date. In options transaction, the purchaser pays the seller an amount for the right to buy or sell. This amount is known as the option premium. Unlike other derivatives, options do not require the purchaser to buy or sell the underlying asset under all conditions. When options are not exercised at expiration, the purchaser simply loses the premium paid. If the options are exercised, the option writer will be responsible for covering the costs of any changes in the value of the underlying that benefit the purchasers.

Swaps are agreements between two counterparties to exchange a series of cash payments for a stated period. The periodic payments can be charged on fixed or floating interest rates, depending on contract terms. The calculation of these payments is based on an agreed amount called the notional principal amount or the notional.

Overall, Derivatives help the economy achieve an efficient allocation of risk. They assist in completing markets, thereby providing firms and individuals with new investment opportunities. Derivatives provide information to financial market participants and may help reduce market volatility. While much has been made of recent derivatives-related losses, the economic benefits provided by derivative securities are more important in every sphere.

### **1.3 Securities market regulation in developed and emerging markets.**

Securities market is very complex system that directly affects to financial stability and it is clear that this market also needs regulation upon it. Regulation is designed to address asymmetries of information between issuers and investors,

clients and financial intermediaries and between counterparties to transactions; and to ensure right functioning of trading, clearing, and settlement mechanisms that will prevent market disruption and substitute investor confidence. Effective securities regulation relies on the existence of a legal framework, good contract and corporate law, a fair and timely judicial process, effective protection of property rights, good accounting and audit standards and taxation rules. The three core objectives of securities regulation are the protection of investors, ensuring that markets are fair, efficient and transparent and the reduction of systemic risk.

Regulation of securities market is conducted by several tools as monetary policy, regulating issuers, intermediaries, secondary markets, market infrastructure, investors and investment process.

Both in developed and emerging markets three methods of regulating securities markets are used:

- regulation of public issuers;
- regulation of market intermediaries;
- regulation of secondary markets;

Regulation of public issuers aims to provide full, timely and precise disclosure of appropriate information to investors and stakeholders. Securities regulators changed merit-based regimes to disclosure-based regimes. Disclosure based regulation of stock market helps to enhance transparency at market trades. Countries with developed stock markets set disclosure requirements that must be continually reflected in annual and quarterly financial reporting. In this case, regulator's role is to enable full, timely and accurate information that helps investors to make right decisions. Mechanisms also work for ensuring reliability of information provided by issuers. Regulation of issuers emphasized the need for satisfactory corporate governance to ensure effective responsibility of management. At the same time, it is important to ensure rights of minority shareholders, whose rights must be clearly defined and noticed at shareholders' meetings. In Uzbekistan, issues on ensuring the rights of minority shareholders came to an affect together with corporate governance. While in many countries

securities markets started to develop without the existence of a public regulator. Now it is commonly recognized that the existence of a public entity is important to the regulation and supervision of the market and market participants and it is vital to the development of markets. It is important that the responsibilities of the regulator must be clear and given a suitable level of independence, legal authority and resources to complete its functions.

Regulation of market intermediaries strive for ensuring intermediaries as brokers, dealers and other participants enter and exit the market without distraction, conduct their business, trade properly in the markets and provide accurate information to the participants. The main methods for the regulation of intermediaries are licensing requirements, and business conduct requirements. In Uzbekistan, regulation of market intermediaries is conducted by Center for coordination and development of securities market (CSM). CSM undertakes licensing and certifying activities for regulating professional participants of stock market.

Self-regulatory organizations can be a variety of institutions such as exchanges, trade associations, private agencies, etc. The use of self-regulation varies widely, although most countries rely upon it to some extent, particularly for market inaccuracy and regulation of intermediaries. In many countries, a stock exchange is the SRO and regulates listed companies and trading. In a few countries, for example, the USA, Canada, and Japan, a separate private agency is responsible for regulation of intermediaries, including designing and monitoring of practical standards and business conduct.

Governmental regulation of securities market in Uzbekistan includes several methods:

- 1) State regulation of stock market is carried out by normative legal acts. Most effective tool for regulation is legislation that directly affects all participants of the market. Hence, with the help of reasonable laws it is possible to ensure development of securities market. At the same time legislation urges participants to trade fairly and conduct their activity according to law.

2) Accumulating financial resources (government and private) to form effective financial market. State acts as an issuer of several securities such as government bonds, treasury bonds and other securities. These instruments are used to perform monetary policy of the government.

3) Setting “game rules” for issuers, investors, borrowers and professional participants.

4) Ensuring financial stability and security of stock markets by setting requirements for entering and leaving markets, controlling financial stability of public companies and setting penalties for breaking certain laws and requirements.

5) Guaranteeing transparency and making information available to participants.

6) Protecting rights of customers.

Market regulatory system is created by the government and functioning of it also provided by the government. Regulation of securities market includes several activities, methods, models, principles and operations on it. These activities are carried out by authorized organizations and self-regulatory organizations. They perform regulatory operation to ensure smooth functioning of the market. Regulation reflects economic and fiscal policies, macroeconomic situation, economic growth and other factors.

Following organizations conduct regulation of securities market in Republic of Uzbekistan:

1. Center on coordination and control of the functioning of the securities market-main functions of this center are releasing normative and legal acts for the participants of securities market, ensuring abundance, registering offered securities and prospectus, and licensing trade organizers.

2. Central bank of Uzbekistan-releases obligatory provisions for commercial banks participating in securities market, acts as issuer of government bonds together with Ministry of Finance;

3. National Association of Investment Institutes-organized to protect investors', investment institutes and other investors' rights. The Association

accepts measures on increasing efficiency of investment institutes' activity, increasing transparency of trades, and introducing international standards for securities market.

The IOSCO Objectives and Principles of Securities Regulation establish a valuable instrument to assess regulation of stock market for both developed and developing countries. The principles were initially published in 1998 and a methodology to evaluate their implementation was approved in 2003.

### **Principles Relating to the Regulator**

1. The responsibilities of the regulator should be clear and objectively stated.
2. The regulator should be operationally independent and accountable in the exercise of its functions and powers.
3. The regulator should have adequate powers, proper resources and the capacity to perform its functions and exercise its powers.
4. The regulator should adopt clear and consistent regulatory processes.
5. The staff of the regulator should observe the highest professional standards, including appropriate standards of confidentiality.

### **Principles of Self-Regulation**

6. The regulatory regime should make appropriate use of self-regulatory organizations (SROs) that exercise some direct oversight responsibility for their respective areas of competence, to the extent appropriate to the size and complexity of the markets.
7. SROs should be subject to the oversight of the regulator and should observe standards of fairness and confidentiality when exercising powers and delegated responsibilities.

### **Principles for the Enforcement of Securities Regulation**

8. The regulator should have comprehensive inspection, investigation and surveillance powers.
9. The regulator should have comprehensive enforcement powers.

10. The regulatory system should ensure an effective and credible use of inspection, investigation, surveillance and enforcement powers and implementation of an effective compliance program.

### **Principles for Cooperation in Regulation**

11. The regulator should have authority to share both public and non-public information with domestic and foreign counterparts.

12. Regulators should institute information sharing mechanisms that establish when and how they will share both public and non-public information with their domestic and foreign counterparts.

13. The regulatory system should allow assistance to be provided to foreign regulators who need to make enquiries in the discharge of their functions and exercise of their powers.

### **Principles for Issuers**

14. There should be full, timely and accurate disclosure of financial results and other information that is material to investors' decisions.

15. Holders of securities in a company should be treated in a fair and equitable manner.

16. Accounting and auditing standards should be of a high and internationally acceptable quality.

### **Principles for Collective Investment Schemes**

17. The regulatory system should set standards for the licensing and the regulation of those who wish to market or operate a collective investment scheme.

18. The regulatory system should provide for rules governing the legal form and structure of collective investment schemes and the segregation and protection of client assets.

19. Regulation should require disclosure, as set forth under the principles for issuers, which is necessary to evaluate the suitability of a collective investment scheme for a particular investor and the value of the investor's interest in the scheme.

20. Regulation should ensure that there is a proper and disclosed basis for asset valuation and pricing and the redemption of units in a collective investment scheme.

### **Principles for Market Intermediaries**

21. Regulation should provide for minimum entry standards for market intermediaries.

22. There should be initial and ongoing capital and other prudential requirements for market intermediaries.

23. Market intermediaries should be required to comply with standards for internal organization and operation conduct that aim to protect the interests of clients, ensure proper management of risk, and under which management of the intermediary accepts primary responsibility for these matters.

24. There should be procedures for dealing with the failure of a market intermediary in order to minimize damage and loss to investors and to contain systemic risk.

### **Principles for the Secondary Market**

25. The establishment of trading systems, including securities exchanges, should be subject to regulatory authorization and oversight.

26. There should be ongoing regulatory supervision of exchanges and trading systems, which should aim to ensure that the integrity of trading is maintained through fair and equitable rules that strike an appropriate balance between the demands of different market participants.

27. Regulation should promote transparency of trading.

28. Regulation should be designed to detect and deter manipulation and other unfair trading practices.

29. Regulation should aim to ensure the proper management of large exposures, default risk and market disruption.

30. The system for clearing and settlement of securities transactions should be subject to regulatory oversight, and designed to ensure that it is fair, effective and efficient and that it reduces systemic risk.

Principles above ensure effective securities market and reduce risks related to the market affecting all processes among participants. These principles will be efficient methodology for our regulation system of securities market. As an example bands 6, 16, 27 are very essential in today's economic situation of our country. Ensuring transparency increases quality of trading, gives available information to potential investors and introduces new emerging companies to the public.

### **Summary**

Securities market is used to attract new capital, transfer real assets to financial assets, determine price, which will balance demand and supply and provide a resources to invest money both in short and long terms. The participants in securities markets include savers and various financial institutions that own financial resources, play as intermediaries, and supply securities market with financial instruments. Investors, issuers and financial institutions participate in two types of markets: primary and secondary markets. Secondary market that has no physical location, known as an over-the-counter market, play important role as stock exchanges. Three main forms of market organization enable the actual trade of securities. They are an auction market, a brokered market, and a dealer market. They differ from each other in organization of trade. There is positive relationship between securities market and economic growth. Some assume that economic growth is a result of effective stock markets, as mentioned above securities market increases quantity and quality of investment. However, some argue that economic growth ensures development of securities market. Developed macroeconomic conditions create sustainable growth for securities market.

There are 3 main types of securities: equities, debt based securities and derivatives. Equity is a claim of share on the company's assets and earned profits. Shares are equity-based securities that have 2 types: common shares and preferred shares. Bond is a long-term debt security that the issuer makes specified payments of interest over a specific period and repays a fixed amount of principal at

maturity. Derivative securities mean financial contracts the value of which is derived from underlying assets or underlying contracts. Derivatives have 4 forms: options, futures, forward and swaps.

Regulation of securities market is designed to address asymmetries of information between issuers and investors, clients and financial intermediaries and between counterparties to transactions; and to ensure right functioning of trading, clearing, and settlement mechanisms that will avoid market interruption and substitute investor self-confidence. Effective securities market regulation relies on the existence of a legal framework, good contract and corporate law, a fair and timely judicial process, effective protection of property rights, good accounting and audit standards and taxation rules. Main objective of securities market regulation is to protect rights of investors, provide accurate implementation of securities market functions.

## **Part II. METHODOLOGY FOR VALUATION SECURITIES MARKET DEVELOPMENT: ANALYZING SECURITIES MARKET IN UZBEKISTAN**

### **2.1 Analyzing stock market: forecasting price movements using technical and fundamental analysis**

Fundamental analysis is the type of analyzing used together with technical analysis. It examines all factors affecting economy, company or other entities to develop a forecast of future prices of certain securities. Fundamental analysis can be implemented to companies, separate industries or economy as whole. When it applied to companies, fundamental analysis includes analyzing financial data, management, business concept, and competition level. At industrial level, it involves examination of supply and demand. For analyzing economy as whole, analysis is focused on economic data and level of future economic growth.

Analyst uses economic, industrial and company analysis to estimate fair value of certain securities. If fair value is not equal to the current price, stock is either overvalued or undervalued. When market value navigates towards fair value, fair value can be main factor to decide to either buy or sell securities.

Most common tool of fundamental analysis is financial ratios. For most uninformed investors it is a bit difficult to use different charts and graphs. Financial ratios are easy to understand and comfortable to make accurate prediction. Financial ratios can be liquidity ratios, leverage ratios, and profitability ratios.

Liquidity ratios show company's ability to repay its current obligations. The higher liquidity ratio provides with resource to meet obligations. The current ratio means company's ability to pay short-term liabilities such as accounts payable and current debt using short-term assets such as cash, inventory and receivables.<sup>2</sup>

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

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<sup>2</sup> Australian Shareholder's Association, The top 15 financial ratios, Lincoln Intelligent Share market Solutions, 2010

Current ratio indicates whether company owns sufficient resources to meet short-term liabilities or it will experience cash flow problems in the future. If ratio equals to one company does not have enough resources to repay obligations and will have problems related to cash flow.

Profit before depreciation and amortization to current liabilities is defined as net operating profit before tax plus non-cash charges in relation to short-term debt obligations. This ratio shows company's ability to repay its liabilities from generated cash flow of trading operations. This ratio is explained as following:

$$\text{PDACL} = \frac{\text{Profit before depreciation and amortization}}{\text{Current liabilities}}$$

Operating cash flow to current liabilities deducts actual cash payments so it demonstrates the strength of company operations. Negative operating cash flow states that company is going backwards. However positive operating cash flow shows strong ability to meet short-term obligations. The higher operating cash flows the less exposure to risk.

$$\text{OCFCL} = \frac{\text{Operating cash flow}}{\text{Current liabilities}}$$

Cash balance to total liabilities shows company's cash balance in relation to total liabilities. Negative cash balance will cause liquidity problems and increase risk. If company has liquid cash balance they will have more cash that can be used to pay for suppliers, banks and other debt based counterparties. Companies having a lower value CBTL will be estimated as risky and investing matters should be revised before implementation.

$$\text{CBTL} = \frac{\text{Cash balance}}{\text{Total liabilities}}$$

Leverage ratios show the extent to which a company uses debt to finance growth. Leverage ratios provide information about long-term creditworthiness of the company. One of the most common leverage ratios is debt to equity ratio. It is used to identify company's reliance on debts or share capital. Debt financing is also good resource of financing expenditures. When it comes to ratio of the debt, it

should not be rather high. If share capital's portion is higher than debts, we can infer that company has positive capital to fund assets and liabilities.

$$\text{DE ratio} = \frac{\text{Total debt}}{\text{Shareholder's equity}}$$

Total liabilities to total tangible assets provide information about company's liabilities in relation to tangible assets. When this ration is high exposure to risk increases as tangible assets cannot meet overall liabilities.

$$\text{TLTAI} = \frac{\text{Total liabilities}}{\text{Total tangible assets}}$$

Interest cover ratio estimates company's ability to meet interest expenses using profits. When ratio is higher than 2, it means, company has full potential to cover interests.

$$\text{Interest cover} = \frac{\text{Net profit before tax+interest}}{\text{Interest}}$$

Profitability ratios used to analyze company's ability to generate profit. Profits are important matter to shareholders as they are used to finance all needs of the company, pay dividends and strengthen its position in the market. Earnings per share indicate earnings in relation to every share issued. Investors usually expect high ratio of EPS and this ratio allows them to get higher income. In practice when company issues additional shares it will directly affect to investors, correspondingly EPS ratio becomes lower. This will be avoided when company widen its business.

$$\text{EPS} = \frac{\text{Net income attributable to common shareholders}}{\text{Total shares outstanding}}$$

Gross profit margin indicates percentage of gross profit in relation to sales. This ratio cannot reflect all necessary information and only can be used to measure production efficiency.

$$\text{Gross profit margin} = \frac{\text{Sales}-\text{Cost of goods sold}}{\text{Sales}} * 100\%$$

Net profit margin indicates if company's revenue will remain after all costs deducted. This ratio is usually compared to other companies' net profit margins to

decide to which invest. Moreover, this can measure company's advantage in competition.

$$\text{Net profit margin} = \frac{\text{Net income}}{\text{Sales}} * 100\%$$

Return on equity (ROE), company's ability to use shareholder's capital to generate profit. Stock exchanges usually require companies to provide financial information so that investors can easily measure the ratios. Two types of ROE used to identify level of management performance.

$$\text{Pre-tax ROE} = \frac{\text{Pre-tax income}}{\text{Average shareholder's equity}} * 100\%$$

$$\text{After-tax ROE} = \frac{\text{After-tax income}}{\text{Average shareholder's equity}} * 100\%$$

Fundamental analysis tries to find fair value of the securities and make reliable conclusion whether to buy or sell certain securities. Fair value is estimated differently for each security. Formula for shares is measured as following:

$$\begin{aligned} \mathcal{V} &= Div_0 \sum_{t=1}^n \frac{(1+g)^t}{(1+r)^t} = \frac{Div_0(1+g)}{(1+r)} + \frac{Div_0(1+g)^2}{(1+r)^2} + \dots + \frac{Div_0(1+g)^n}{(1+r)^n} \\ \mathcal{V} &= \frac{Div_0(1+g)}{(1+r)} * \frac{\left(\frac{1+g}{1+r}\right)^n - 1}{\left(\frac{1+g}{1+r}\right) - 1} = \frac{Div_0(1+g)}{g-r} * \left[ \frac{(1+g)^n}{(1+r)^n} - 1 \right] \\ \mathcal{V} &= Div_0 * \frac{(1+g)}{(r-g)} * \left[ 1 - \frac{(1+g)^n}{(1+r)^n} \right] \end{aligned}$$

When  $n \rightarrow \infty$  formula is described as:

$$\mathcal{V} = Div_0 * \frac{(1+g)}{(r-g)}$$

$Div_0$  – primary constant level of dividends

$r$  - Dividend yield

$g$  – Annual growth rate of dividends

In this formula, we consider valuing fair value using dividend model. In this case, if fair value is higher than current value, stock will be undervalued. If current value is higher than fair value then stock is overvalued.

In order to understand fundamental analysis we analyze General Motors corporations' financial reports presented to NASDAQ in J-13 form. Table below shows estimation of given ratios.

**Table 2**

**Estimation of financial ratios<sup>3</sup>**

<b>№</b>	<b>Type of ratio</b>	<b>01.31.2015</b>	<b>01.31.2014</b>	<b>Trend</b>
1.	Current ratio	1.09	1.27	Downward
2.	PDACL	0.256	0.210	Downward
3.	OCFCL	(0.028)	0.002	Upward
4.	CBTL	(0.024)	(0.008)	Upward
5.	DE ratio	3.228	3.263	Upward
6.	TLTAI	3.009	4.081	Upward
7.	Interest cover	18.422	11.536	Downward
8.	EPS	0.006	0.002	Downward
9.	Gross profit margin	0.12	0.09	Downward
10.	Net profit margin	0.06	0.03	Downward
11.	Pre-tax ROE	0.19	0.12	Downward
12.	After-tax ROE	0.24	0.11	Downward

General Motors ended previous year with downward trend. Current ratio was normal but, it decreased comparing to 2014, company gradually lost liquidity. Operating cash flow to total liabilities was not sufficient to cover all the needs of the company, thus company had negative operating cash flow. Debt to equity ratio of the company nearly stayed flat just rose to 0.035 units. However, company has enough tangible assets to meet total liabilities. We can infer that General Motors Company can easily cover interest payments, but this ability was slightly lower than previous year. There is a fluctuation in the number of outstanding shares. This year company decreased number of outstanding shares to 0.1 billion, unfortunately EPS rate did not grow. Reason is that company was not able to generate enough profit in 2015. Because of reduction in sales gross and net margins was not able to overtake previous year's results. ROE ratios nearly halved than preceding year.

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<sup>3</sup>Source: prepared by author using information on [www.nasdaq.com](http://www.nasdaq.com) (Official website of over the counter market NASDAQ)

Overall, fundamental analysis ratios show that company is facing some liquidity problems and increase in profitability was not able to overtake last years' results. Annual dividend growth rate equals to 4.54% and dividend yield is 5.13%. Currently dividend per share equals to \$5.50. We estimate fair value as following:

$$V = 5.50 * \frac{1+0.0454}{0.0513-0.0454} = 5.46$$

This means current dividend is higher than its fair value. This means company is willing to pay more than its real value, so company's current value is adequate. Despite the reduction in sales company did not decrease dividend to their investors.

Technical analysis is frequently used together with fundamental analysis. This analysis states that price of securities is formed due to supply and demand. Market information and financial data are all reflected in price. Technical analysis is based on studying past values and predicting about future changes. Technical analysts deeply study market situation and make assumptions about it. In technical analysis, technical characteristics are used to predict turning points, highs, lows or evens. Characteristics of past analysis will help in identification of important price movements. Technical analysis aims to predict the prices of securities. The price formed with the help of all factors and settled between buyers and sellers. Using different statistical data and estimations help to show reasons of price fluctuations.

Some basic theories help to understand technical analysis and make reliable assumptions. Basic theory of the technical analysis is "Everything known about a company is reflected in the current market price". Technical analysis estimates all current economic, fundamental, behavioral factors, other direct and indirect market influences. They are all reflected in the price and volume data. Thus price action is all that required to predict changes in supply and demand. As an example, if prices start to rise, demand shall exceed supply. As a result, supply rises and price start to drop.

Next basic theory of technical analysis is "Price moves in trends". People usually imitate actions of one who acts better than they do. When Warren Buffet

says that he is going to buy stocks of AAA Company, good imitators will also try to buy these stocks. As a result, this will cause buying trend at market. Moreover, investors usually want to buy trending stocks and try to analyze the strength of trend to decide on buying or selling them. In order to have positive value, participants should note that prices form in trends.

Another basic theory states “History repeats itself”. So good technical analyst carefully analysis certain trends and patterns to clearly predict about future fluctuations. Several charts are used in technical analysis, so we can infer that analyzing without charts is impossible. Charts show history, volume and performance of price at specific time. Besides they show where the price has been, where points of supply and demand and how price is going to act. Better understanding charts will give more chances to understand technical analysis. The chart itself and other supplementary indicators can be used as instruments and help analyst to identify the trend of trading. Both fundamental and technical analysis provides investors with sufficient tool that may guarantee successful results in the market.

Stock charts are basic tool for technical analysis. Charts together with its supplementary indicators help analyst to find the navigation of prices over the time. Main types of charts include bar charts, line charts, point & figure chart, and candlestick patterns. They can be used to support analyst visually.

Bar charts are type of charts used commonly among analysts. Bar chart displays open, close, high and low prices. It clearly shows how prices perform in specific period. Graph shown in Figure 3, the top of each vertical line means reached highest price and the bottom of the line shows lowest price of specific period. The tick shown in the right side of the line represents close price and the left side tick shows close price of traded security. Real time Dow Jones industrial average displayed in bar chart shows that close and open prices have been the same and low price was equal to 16278.00. Respectively 16410.96 was highest price of that time. Today’s close price was lower than yesterday’s close price to \$21.44 or 0.13%. Overall picture shows bear market trend over the period.

## DOW INDUSTRIALS (\$DOWI)

Fri, Feb 19th, 2016



Figure 3 Dow Jones industrial average displayed in bar chart<sup>4</sup>

Line chart is most common and simplest form of charting. Each plot shows open close, high and low price and draws line connecting these points. Usually chart lines are comfortable for displaying overall trend of the market. We try to read the line chart shown below and make conclusions.



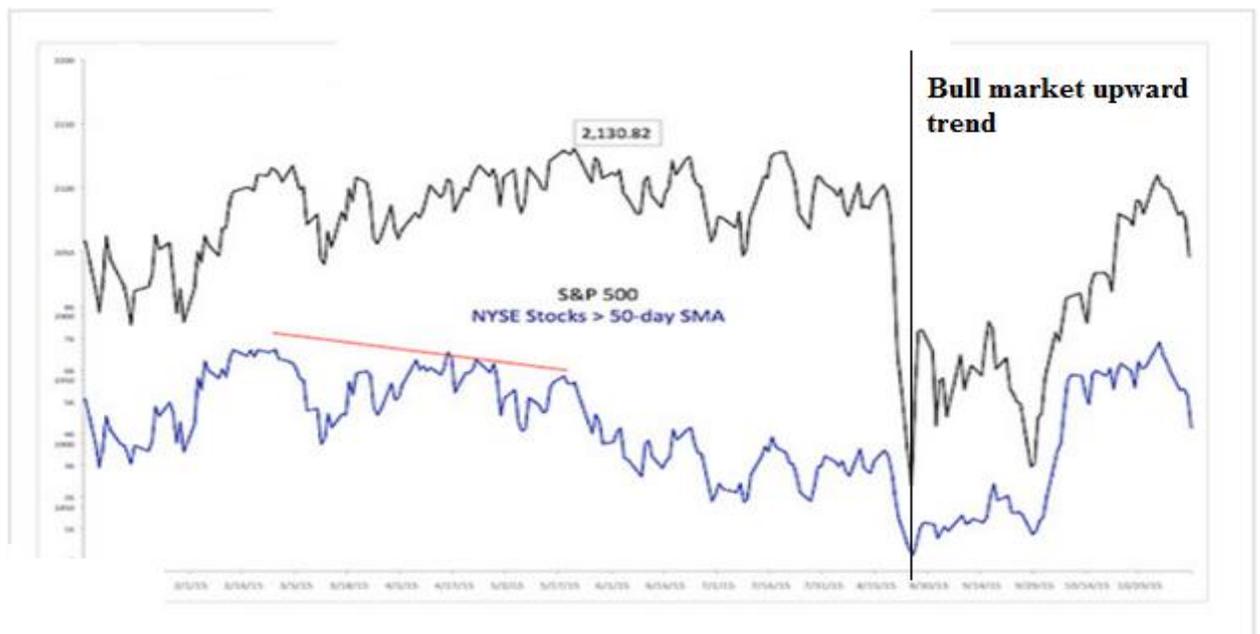
Figure 4 Bullish trend, Real time Berkshire Hathaway Inc. performance<sup>5</sup>

<sup>4</sup> Source: [www.bloomberg.org](http://www.bloomberg.org) (Official website of Bloomberg Inc. world economic information portal)

<sup>5</sup> Source: prepared by author using information on [www.cnn.com](http://www.cnn.com) (Official website of CNN world economic news portal)

We can infer from the table that securities of Berkshire Hathaway Inc. showed bearish trend over the year. In 6 months' time prices fluctuated between 190,000 and 208,000 stock prices were not able to overtake results of previous 6 months. On my prognosis, stock prices tend to increase until 200,000. As history repeats itself, prices are going towards 200,000 or even higher. Good market trader in this case tries to sell stocks and benefit from it. However, it is advisable to conservative investors to hold company's stocks and expect higher outcomes from the company.

Line charts exactly display trends of bullish and bearish markets and it is more comfortable to analyze than other charts.



**Figure 5 S&P500 trend in 2015<sup>6</sup>**

According to statistics, most indices showed upward trend in 2015 comparing to two months of 2016. Overall trend shows the existence of bull market during the period. Until the third quarter of the year, bull market overtook bearish market. In the beginning of the third quarter, bearish market trend appeared and stayed stable for two months. In the last two months, bull trend appeared in the market and ended the year up.

<sup>6</sup> Source: [www.investing.com](http://www.investing.com) (Official website designated to inform investors from all over the world)

Point & figure chart is not commonly used so differs from other types. There is not axis of time in the graph. When prices start to fall vertical line of crosses are drawn and it continues until prices start to rise. As prices start to rise again, circles are drawn in the next column.

Candlestick patterns resemble to bar charts but give more detailed information than bar charts. Thick part of the body is called real body and it can be shaded or non-shaded. Real body is a difference between close and open prices. When open price is below close price it is called non-shaded body. Once close price is lower open price it is called shaded body. Shaded bodies can be filled in red or black when there is bearish trend. When body is filled in white or green, it can be inferred that it is bullish trend.



**Figure 6 Dow Jones Industrial Average displayed in candlestick patterns<sup>7</sup>**

According to this chart, market is going towards bull uptrend market. For January 1, 2016, real body was not long but bullish trend. Close price rose from its open price but the range was short. Lowest price reached up to 15500 while high price was near to close price. Previous pattern initially showed that there would be uptrend and price reached to 16,614.05. In the last pattern buyers tried to dominate

<sup>7</sup> Source [www.investing.com](http://www.investing.com) (Official website designated to inform investors from all over the world)

in the market, overall prices rose comparing to the last pattern. It can be seen tomorrow's open price will be between 16,500 and 17,500.

## **2.2 Macroeconomic determinants of stock market development**

Stock markets are complex systems that directly affect macroeconomic stability and economic growth. Stock market development provides each country and economic subjects with several privileges. As mentioned above stock market provide economic subjects with cheap and fast funds, increase liquidity, reduce risks, and alternate bank financing.

Stock market development is achieved by several factors and developed relatively with them. Most foreign economists count determinants directly affecting stock market development. In my research, I analyzed most important determinants that affect development of securities market. Macroeconomic determinants such as banking sector, investment, insurance system, income levels and other institutional factors are important to development of securities market. These determinants affect differently to the growth of securities market and it depends on development of affecting factors.

Banking sector development is important to economic growth. It accumulates savings and channels to economic participants. At the same time, banking sector complements stock markets as it also allocates savings into investments. Banking sector development is estimated by several ratios and these ratios are correlated with other spheres. These indicators show development of banking sector: deposit money bank assets to GDP, M2 to GDP, deposits to GDP, private credit to GDP, private credit to total credit, private credit to deposits, % of people with bank account and etc.

**Table 7**

### **Banking sector development indices of Uzbekistan<sup>8</sup>**

<b>Indicators</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Bank assets to GDP	36.95%	36.89%	38.78%	38.03%
Deposits to GDP	-	21.93%	19.67%	20.77%
Private credit to GDP	5.53%	5.88%	6.34%	7.06%
Private credit to total credit	26.21%	26.35%	32.91%	32.30%
Private credit to deposits	-	26.75%	37.84%	38.45%
% of people with bank account	-	-	62%	63%

This table shows banking sector development from 2012 to 2015. Bank assets relation to GDP is rising significantly. Respectively all ratios are increasing together with GDP increase. Banking sector has assets 1/3 of GDP in addition; nearly 20% of GDP is accumulated in banks in form of deposits. At the same time share of private credit is also increasing in relation to gross domestic product. About 30-40% of private credit is allocated from deposits. Respectively the percentage of people owning bank account also showed significant increase. According to report of Central Bank of Uzbekistan, the number of people with bank accounts is increasing year by year. Share of credit allocated from deposit is increasing as more deposits are transformed into credits. However, in the view of some economists the ratio significantly correlated to stock market trading volume. When more deposits are accumulated in banks, it reduces savings that can be invested to securities.

Most banking sector indices are highly correlated with stock market indices. In our economy, banking sector actively participate in stock markets as beneficiaries. 18 commercial markets are listed in “Tashkent” RSE and their stocks are actively traded among participants. Each year, Central bank of Uzbekistan

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<sup>8</sup> Source: prepared by author using information on [www.cbu.uz](http://www.cbu.uz) (Official website of Central bank of Uzbekistan)

announces commercial bank’s performance at “Tashkent” RSE along with their issued securities.

**Table 8**

**Performance of commercial banks at “Tashkent” RSE<sup>9</sup>**

Year	Value of issued shares	Percentage of listed shares	Number of participant banks
2012	500 billion sums	25%	17
2013	534.5 billion sums	25%	17
2014	525.2 billion sums	25%	18
2015	553.6 billion sums	25%	18

According to the table, value of issued shares is increasing in an annual basis. Each year it is aimed to sell stocks other than governmental organizations mainly to private sector. In 2014, 209.2 billion sums of bank stocks were sold to private companies. However, more than 60% of shares were bought by government organizations. In order to liberalize stock market this 60% should be channeled to private companies. In 2015, private companies bought about 319.6 billion sums of bank stocks or they purchased 57.73% of offered stocks. As it can be seen banks are attracting more private shareholders and decreasing share of government.

Each month Tashkent RSE publishes top active listed companies’ list that actively participate in trades and whose shares are traded most. For the last 30 days, from 24 listed companies 8 of them were commercial banks.

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<sup>9</sup> Source: prepared by author using information on [www.cbu.uz](http://www.cbu.uz) (Official website of Central bank of Uzbekistan)

**Table 9****Top listed 8 banks in the last 30 days in Tashkent RSE<sup>10</sup>**

Names	Overall turnover	Number of trades
Ipoteka bank ATIB	16078254186,00	379
AT Aloqabank	3024411000,00	1
Turkiston XATB	600000000,00	1
O'zsanoatqurilishbank ATB	426656210,00	20
Agrobank ATB	180000480,00	1
Turonbank ATB	3010560,00	2
Hamkorbank ATB	1444600,00	1
Trastbank XAB	42000,00	1

Especially, most active stock market participant was Ipoteka bank whose turnover reached to 16078254186.00 sums. This bank was able to trade 379 times as buyer and seller. In the last 30 days share of Ipoteka bank in overall turnover was 9.986%. Overall share of banking sector in exchange turnover was 87.8% in 2015. Currently most commercial markets dominate in secondary market and share of three commercial banks reached to 65.7% in that year. We try to find relationship between bank deposits and volume of turnover undertaken by banks.

**Table 10****Correlation between amount of bank deposits and bank's share in turnover of "Tashkent" RSE<sup>11</sup>**

	Bank deposits (X)	Share of banks in turnover (Y)	$X^2$	$Y^2$	XY
2012	20.05	88.1	402.00	7761.61	1766.41
2013	26.1	79.2	681.21	6272.64	2067.12
2014	28.5	85.6	812.25	7327.36	2439.6
2015	35.6	141.4	1267.36	19993.96	5033.84
Total	110.25	394.3	3162.82	41355.57	11306.97

<sup>10</sup> Source: prepared by author using information on [www.uzse.uz](http://www.uzse.uz) (Official website of Tashkent stock exchange)

<sup>11</sup> Source: prepared by author using information on [www.uzse.uz](http://www.uzse.uz) (Official website of Tashkent stock exchange) and [www.cbu.uz](http://www.cbu.uz) (Official website of Central bank of Uzbekistan)

$$\overline{xy} = \frac{\sum xy}{n} = \frac{11306.97}{4} = 2826.74$$

$$\bar{x} = \frac{\sum x}{n} = \frac{110.25}{4} = 27.56$$

$$\bar{y} = \frac{\sum y}{n} = \frac{394.3}{4} = 98.58$$

$$\bar{x}^2 = \frac{\sum x^2}{n} = \frac{3162.82}{4} = 790.71$$

$$\bar{y}^2 = \frac{\sum y^2}{n} = \frac{41355057}{4} = 10338.89$$

$$\sigma_x = \sqrt{\bar{x}^2 - (\bar{x})^2} = \sqrt{790.71 - 759.55} = \sqrt{31.16} = 5.58$$

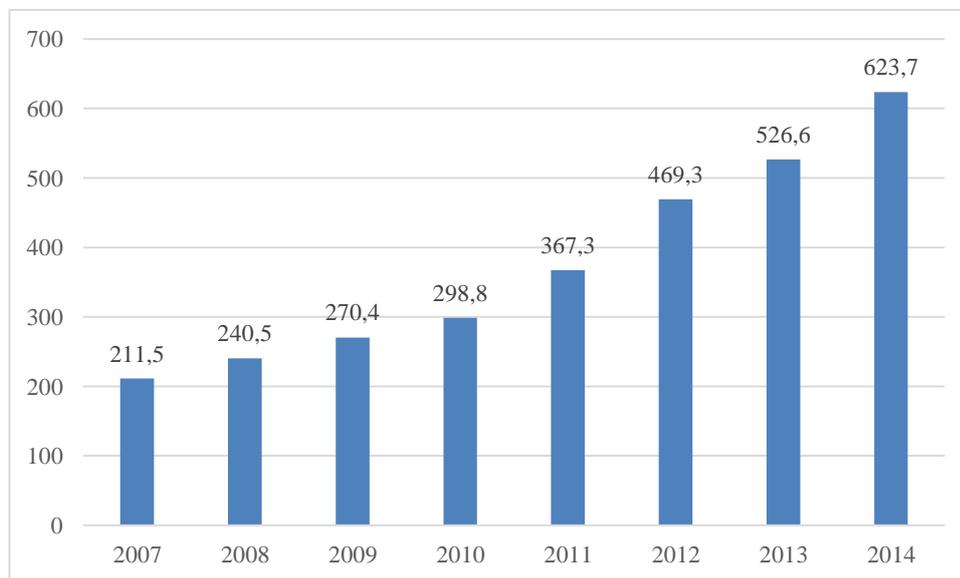
$$\sigma_y = \sqrt{\bar{y}^2 - (\bar{y})^2} = \sqrt{10338.89 - 9718.02} = \sqrt{620.87} = 24.92$$

$$r = \frac{\overline{xy} - \bar{x} \cdot \bar{y}}{\sigma_x \sigma_y} = \frac{2826.74 - 27.56 \cdot 98.58}{5.58 \cdot 24.92} = \frac{109.88}{139.05} = 0.7902$$

We can infer that there is moderate relationship between bank deposits and share of banks in stock market turnover. Correlation coefficient is used to identify strength of relationship between two factors. In our example, relationship strength equals to 79.02%. It means bank deposits mainly channeled to stock markets as bank resources. Hence banks are not solely dependent on their deposits they facilitate trades using other non-deposit resources. If we assume, correlation coefficient to be about 95-96% we would see that banks were not able to use resources other than bank deposits. In our example, it is typical relationship hence shows good maneuver of banks using their resources.

Insurance companies accumulate tremendous premiums that can be valuable resources for securities market. They directly attend to increase premium value from return of the market. In developed countries, insurance companies are most active participants together with corporations. They constantly buy, sell securities and form their investment portfolios. Financial resources of insurance companies are transformed to investment with the help of securities market. Development of insurance market directly affects securities markets. Sometimes it is possible that insurance companies accumulate more capital than banks do. Hence, insurance companies do not save them until risk happens and they pay it back, but channel accumulated resources to the profitable sectors that increase the volume of invested

premiums. When insurance companies participate in trading, volume of trade increases as insurance companies own the same resources as banks. Currently, insurance companies in Uzbekistan are trying to increase profits from financial activities and attending at exchange trades as buyers or sellers.



**Figure 11 Dynamics of increasing investment volume of insurance companies<sup>12</sup>**

There is upward trend in volume of investment allocated to sectors of economy. In 2014, volume of investment reached to 623.7 billion sums and rose three times, as it was in 2007. Each year annual growth was about 100 billion sums and growth rates were about 15-17% percent comparing to previous years. At the same time, it is important to find average annual growth rate to display real picture of increases. In order to find average growth rate it is preferred to use this formula because it is used to find annual growth rates of consecutive years:

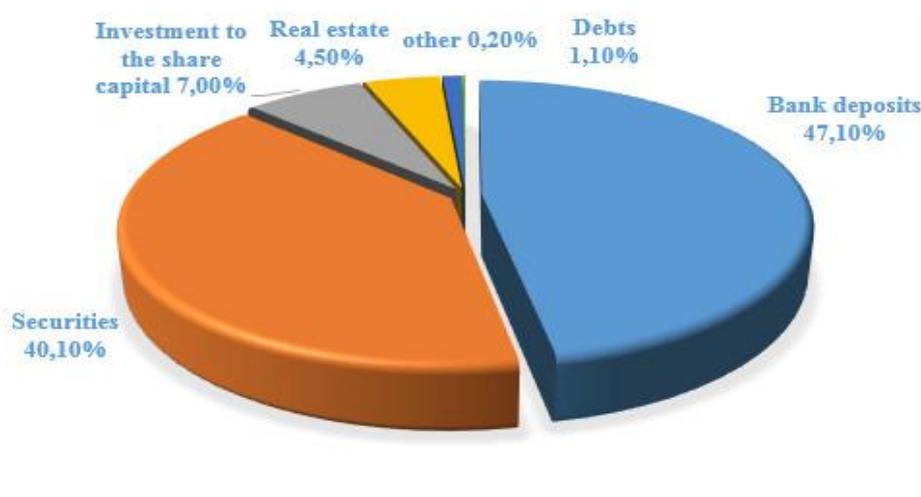
$$K = \sqrt[n-1]{K_1 * K_2 * ... * K_n} = \sum_{i=1} \sqrt{K_i}$$

$$K = \sqrt{1,371 * 1,1243 * 1,105 * 1,2292 * 1,2778 * 1,1221 * 1.1843} = 1,1671$$

From 2007 to 2014, annual growth rate of investments was 16.71%. This rate seems to be not enough to gain higher results. As we can see inflation rate was about 7%, comparison between them was 9.42%, and growth rate was 4.42%

<sup>12</sup> Source: Annual report on regulation and control over insurance activities in Uzbekistan, 2014

higher than interest rates. It is advisable for insurance companies to raise investment potential to get sufficient amount of profit.



**Figure 12 Investment portfolio of insurance companies in 2014<sup>13</sup>**

However, these days most of insurance premiums are directly channeled to bank deposits rather than stock markets. In modern economy, each entity forms their investment portfolio to lesser risk exposure and get sufficient amount of profits. Insurance companies also form investment portfolio for that reason. We can see that two major financial sectors formed investment portfolio. Share of securities was about 40.10% while bank deposits were about 47.10%. There is a little difference between them. Using information in Figure 11 we can find that about 293.76 billion sums was channeled to banking sector in form of bank deposits. At the same time 250.10 billion sums was directed to securities market. Using information given above we try to find the relationship between deposit amounts and investment directed to banking sector.

In 2014, amount of deposits in commercial banks was 28.5 trillion sums correspondingly; amount of investment directed to bank deposits from insurance companies was about 293.76 billion sums. The share of insurance companies' investment in bank deposits was about 1.30%. In contrast, share of insurance

<sup>13</sup> Source: Annual report on regulation and control over insurance activities in Uzbekistan, 2014

companies in stock market turnover was annually about 0.6-0.8%. We can see from the graph that insurance companies raising their investment flow to the banking sector in form of bank deposits, while they decreasing their investments to the securities market. Single factor for this can be difference between deposit rate and dividend yield. Insurance companies also business they try to increase their returns so it is natural that they should prefer bank deposits.

There are several macroeconomic determinants other than banking sector or insurance sector. Income level is one of factors, which is important in development of securities market. One can easily understand that the more income level gained the more investment level increased. In economy, savings and consumption are studied together to find relation between them. When savings increase people will have more to invest and take returns to increase wealth. Income level directly affects stock market when individual investors participate in secondary market. Once secondary market commit its functions without disruption income level matters as independent factor.

Income level characterizes part of GDP acquired by subjects of economy. Income level depends on volume of gross domestic product and activity of human factor. Countries with developed economies have high level of income. Especially income level per capita shows actual outcomes, that people get from their activities. Level of income mainly depends on human activity and GDP. According to president's annual speeches about macroeconomic indicators and main economic priorities of the country, income level is increasing through the years. Total growth of income was 23.10% in 2011 and 47% it taken from business activities. Total growth rate in 2013 reached to 16% comparing to the level of 2012. Income level per capita has been demonstrating growth trend. Real income level per capita in 2014 showed 10.2% rise and 52% of all income was taken from business activities. In 2015, income level per capita demonstrated increase, which was 9.6% and 52% of which was acquired from business. These figures can be enough to be reinvested to other activities like equity or debt financing. If we count effect of inflation, growth rate fluctuates between 3-4% comparing to

foregoing years. These levels of income continues to grow like these percentages, they will be important resources to participate in financial markets.

Foreign investment is capital flow from other countries channeled to certain sector of the economy. In our system, two types of investment can be directed to the economy. First type of investment is known as foreign direct investment and the other is portfolio investment. We will not discuss foreign direct investment because it is focused on investment in real assets. Portfolio investment is accomplished at stock exchanges. Forming portfolio means buying or selling certain group of securities to get optimal returns. Aim of which is to decrease risk exposure and increase yields. According to statistics, each year Uzbekistan accepts about 3 trillion sums of foreign investment. These days our economic condition requires foreign direct investment rather than portfolio investment. More than 70% of acquired foreign capital is in form of direct investment. Share of portfolio investment is relatively small and foreign investors usually do not participate in exchange trades or share of them is relatively small.

Now there have been attempts to attract foreign investors to our joint stock companies hence our stock markets. Once foreign investors buy securities of local companies, both parties get profits; investors get stable income, company will have additional resources to cover its expenses and have diversified investors.

In developed countries, development of stock market is estimated using market capitalization rate and number of listed companies. We also try to find capitalization to GDP ratio to find stock market development in Uzbekistan. Market turnover or number of listed companies cannot fully reflect state of securities market. Market turnover is also important factor, but it does not show quality of stock market and only reflect quantity. As for number of listed companies, they demonstrate quantity matters. In practice, exchanges with small number of listed companies also can be developed as these companies can facilitate great number of trades. In some developing countries, number of listed companies is limited. This was result of mergers and acquisitions in progress. Mergers and acquisitions in this case created large competitive companies that

owns majority of market turnover. These large companies attract foreign investors because of its profitability and scale.

Market capitalization is number of listed companies at stock exchange multiplied by local currency average price of listed companies. Market capitalization is main factor to identify scale of stock market and shows quality and quantity of it. Average price of listed companies is not publicly available so we only can use market capitalization of listed companies in relation to gross domestic product to find stock market development in Uzbekistan. In order to understand this relationship it is advisable to draw table using information taken from different sources.

**Table 13**

**Gross domestic product and market capitalization of listed companies<sup>14</sup>**

	GDP	Market capitalization	Market capitalization in relation to GDP
2012	96.6	5.446	5.64%
2013	119	6.364	5.35%
2014	144.9	7.018	4.84%
2015	171.4	8.436	4.92%

We can see from the table that stock market in Uzbekistan is less developed than other financial intermediaries like banks or insurance companies. Market capitalization of listed companies is relatively insignificant when it is compared to gross domestic product. Market capitalization of listed companies is increasing in a yearly basis. Annual growth rate of market capitalization equals 15.77% while annual growth rate of GDP is about 8%. However, market capitalization cannot outpace growth rate of GDP. When market capitalization to GDP rate becomes about 80-90% stock market can be estimated as well developed and play important method of financing requirements of companies. Subject of economy not only address banks to get financial resources but also securities markets. For most

<sup>14</sup> Source: prepared by author using information on [www.uzse.uz](http://www.uzse.uz) (Official website of Tashkent stock exchange) and [www.cbu.uz](http://www.cbu.uz) (Official website of Central bank of Uzbekistan)

emerging markets market capitalization rate fluctuates between 40-50% and part of financial needs are financed with the help of stock markets. Comparing bank activity to securities market it can be found that bank financing dominates in economy.

Average growth rate of market capitalization ratio equals to 4.34% and nearly 2 times slower than GDP growth rate and about 1-2% lower than inflation rate. Slow increase in capitalization ratio is result of low efficiency of most listed companies. Market capitalization of firms depend on price of securities that firm offer and demand in market to these securities. At the same time, the number of listed companies also affects market capitalization as it is multiplied by average price of listed companies as mentioned above. Although there was increase in the number of listed companies, market capitalization was not affected by it. In 2015, 128 companies have been listed to the exchange, which was 96% higher than it was in 2014. This sharp increase only resulted to 0.08% change in market capitalization rate. For better outcomes, it is preferred to increase efficiency of listed companies and number of listed companies. The market value of efficient companies usually highly valued and price of their securities are great. However, we should understand that market capitalization does not solely depend on price of shares, but also other factors like profitability of company, value of share capital, scale and scope of business, behavioral attitude towards company's securities.

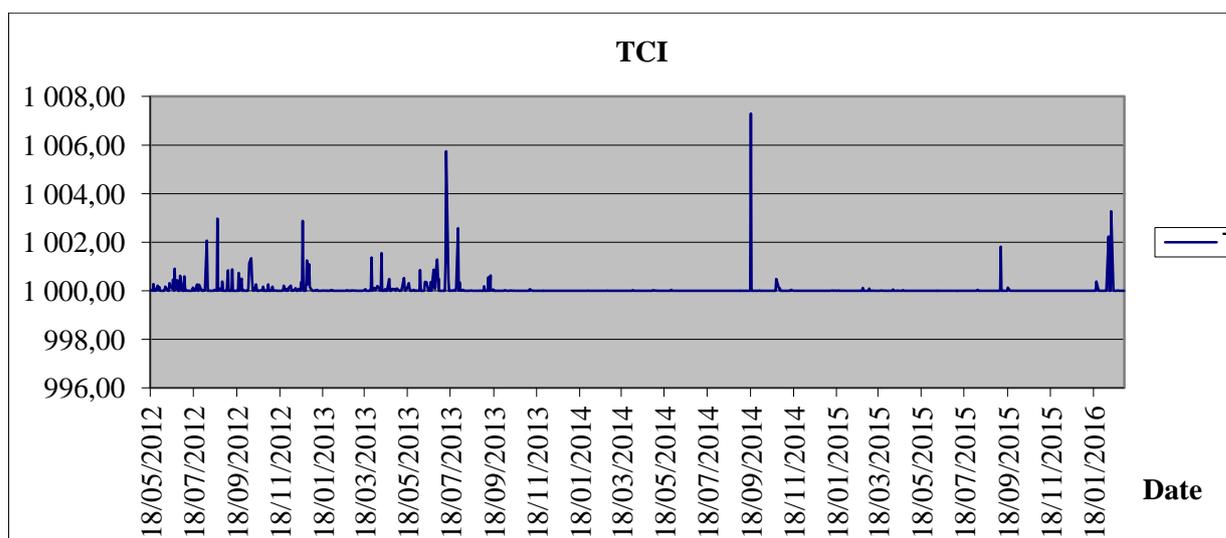
Analyzed macroeconomic determinants are counterparts of securities market and their activities are directly affected by each other. In our examples, most important determinant is banking sector development. As it was said previously, banks are active participants of stock markets together with being well developed in our economy. Securities of banking sector are traded continually and yield higher return than other companies' yield. Compared graphs show stock market in Uzbekistan cannot fully commit its function without existence of banks. Other factors currently not important as banking sector, we hope that they will be also important factor to consider in the near future.

### **2.3 Analyzing Performance of “Tashkent” RSE**

“Tashkent” Republican stock exchange was established with the initiative of President of Uzbekistan Islam Karimov in April 8, 1994 to develop financial activities of firms and allow free flow of capital from financial sector to real. Now exchange is well developed; has professional employees and conducts international relationship with other world famous stock exchanges. Especially it has strong connection with Korean stock exchange, which owns 25-1% of total exchange’s shares. 50+1% shares belong to the state committee of the Republic of Uzbekistan for privatization, demonopolization and development of competition and 25% of shares are possessed by commercial banks.

Every month exchange publishes bulletin showing complete activity of exchange. We try to analyze these bulletins to make assumptions about stock market condition in Uzbekistan.

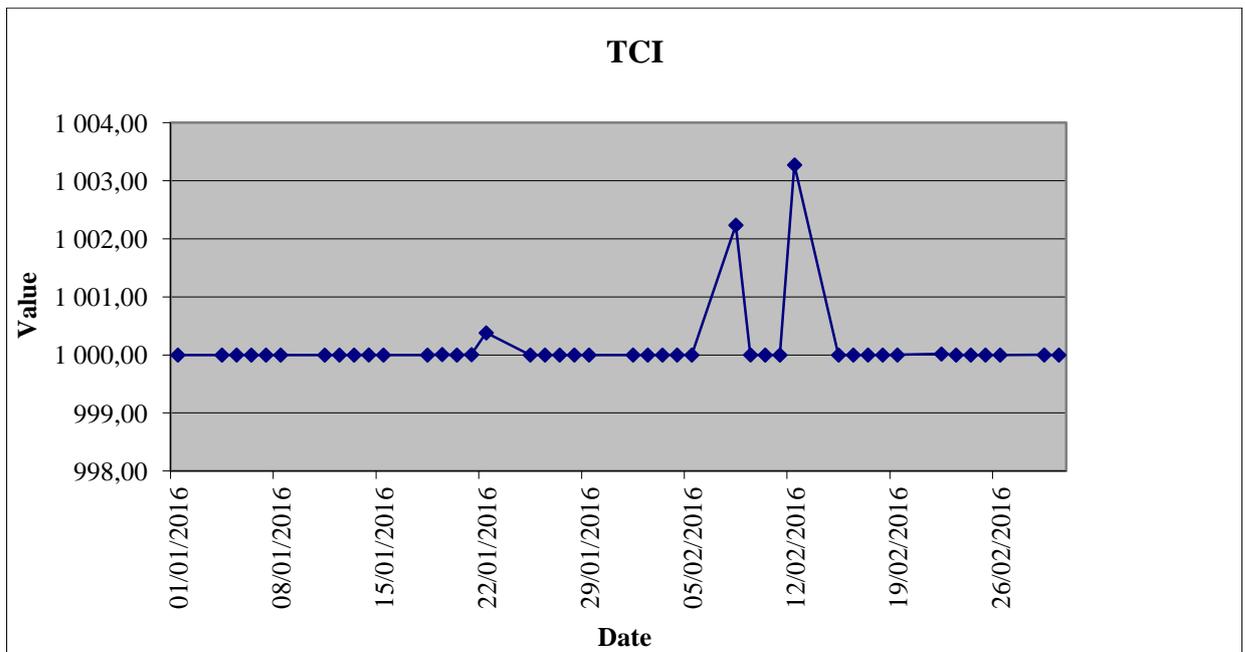
TCI is composite index of listed companies in “Tashkent” RSE and show average price of securities for specified time. TCI index is estimated in a daily basis and updated every day. Index shows state of certain securities and its performance in a market. TCI composite index is estimated as stable because it does not show sharp declines or increases in a short period. Investors use this index to decide on to buy or hold the securities for specific time. At the same time, this index is comparable to other world stock exchange indexes as Nikkei, Dow Jones or S&P 500. In order to compare these indexes it is advisable to estimate them in a certain currency.



**Figure 14 Performance of TCI index<sup>15</sup>**

This table shows TCI index is almost staying constant over the period and we can see slight changes in the value of securities. Especially in September 18, 2014 index reached to its highest value 1008.00 while lowest value is about 1000.00. Only clear assumption about this index is that, value of index is comparatively low and fluctuates between 1000.00 and 1008.00. It is easy to make conclusion using this index, because it usually equals to 1000.00. When securities market develops this index changes very fast and value becomes greater because this index is character of secondary market.

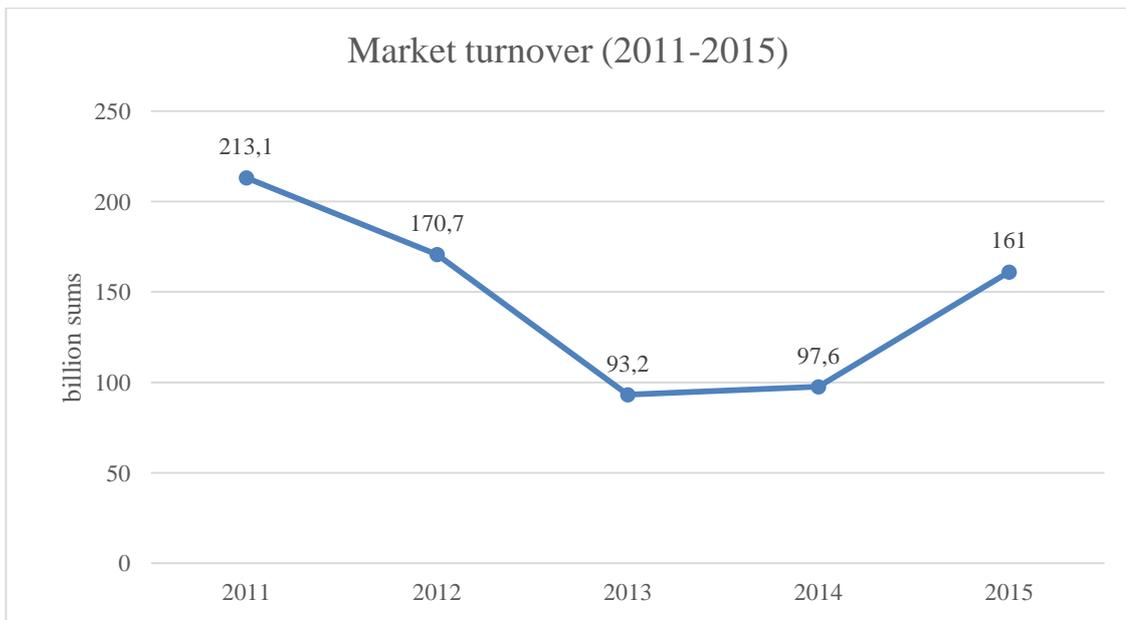
<sup>15</sup> Monthly bulletin of “Tashkent” RSE



**Figure 15 Performance of TCI index for 2 months of 2016<sup>16</sup>**

For 2 months of 2016, index is not significantly changeable. It fluctuated between 1004.00 and 1000.00. If we try to find support level, it will be 1000.00 and resistance 1004.00. This trend can be evaluated as stable but not profitable enough. Unlike other well-known indices, TCI is not changeable and we cannot see sharp declines or dramatic increases. From January 22 to 29 showed insignificant change about 000.50 units. Most significant changes were seen between February 5 and 12 as it reached to resistance level. After February 12 it bounced back to its support level. Supply and demand constantly adjust their position and equilibrium price 1000.00 nearly stays the same.

<sup>16</sup> Monthly bulletin of “Tashkent” RSE

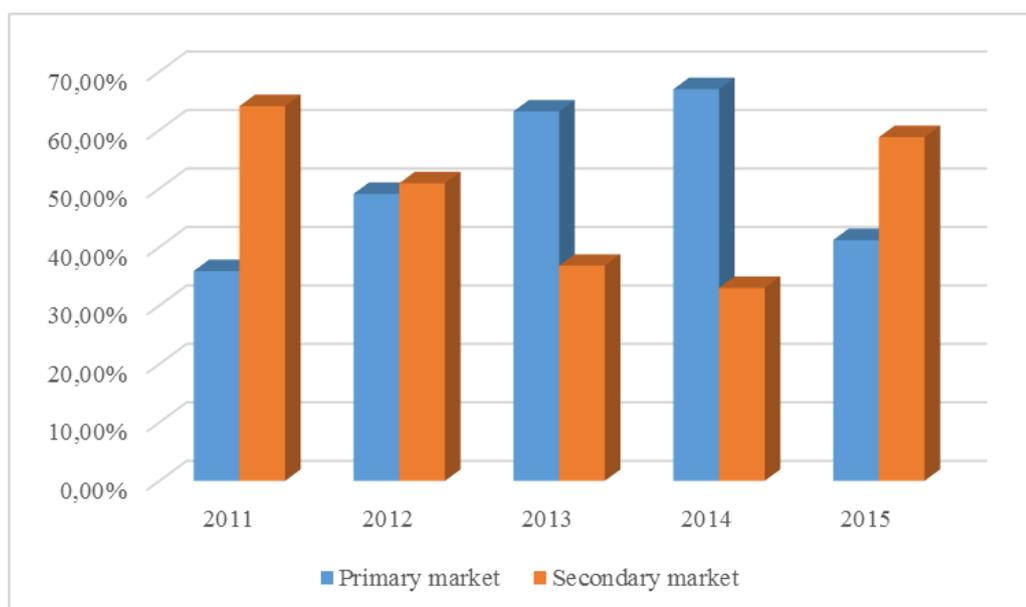


**Figure16 Market turnover of “Tashkent” RSE (2011-2015)<sup>17</sup>**

In 2015, number of exchange agreements reached to 2794, which is the highest of last 5 consecutive years and 3 times more than previous year’s amount. As it can be seen from the Figure 3 that market turnover is fluctuating over the period. In 2015, market turnover was 161 billion sums that is 1.7 times more than preceding year. We can infer that average annual growth was about 147.12 billion sums. Respectively previous lows 93.2 billion sums and 97.6 billion sums directly affected average annual growth. Average growth rate was also affected by these sharp declines and was equal to 93.17%.

357 billion securities of 79 joint stock companies were issued and placed in exchange as initial public offering. 94.7 billion sums or 58.8% of market turnover belonged to secondary market and it was 3 times higher than 2014. Share of corporate bonds in secondary market turnover was 7.5 billion sums which was 1.3 billion sums or nearly 6 times more than in 2014.

<sup>17</sup> Monthly bulletin of “Tashkent” RSE



**Figure 17 Structure of securities market (2011-2015)<sup>18</sup>**

We can see from the picture that there was significant increase in the share of secondary market. Total share of secondary market was 58.8% or 25.8% higher than it was in 2014. One of the most prominent changes in secondary market was increase in attendance of huge commercial banks. Ipoteka bank was most active participant of secondary market whose market share was about 43 billion sums in 2015 or 45.8%. The share of other two banks Asia Alliance bank and InFinbank was respectively 12.6 and 6.2 billion sums.

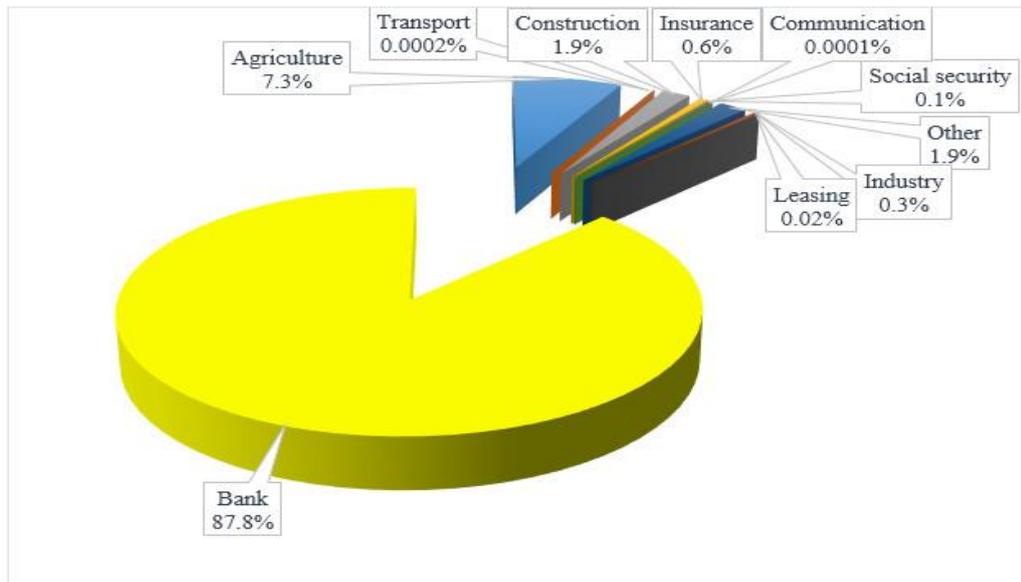
The percentage of primary market is gradually decreasing comparing to 2014, which was 41.2% or 66.3 billion sums. Structure of market turnover can be divided as following:

- additional offering of shares was 66.3 billion sums and 9.65% or 2.5 million USD of which was corporate securities.

- in 2015, corporate bonds were not offered to public only existing bonds were traded at secondary market. The preceding issued securities were about 7.0 billion UZS.

- shares amounting 87.2 billion UZS and corporate bonds 7.5 billion sums were traded in secondary market among former banks.

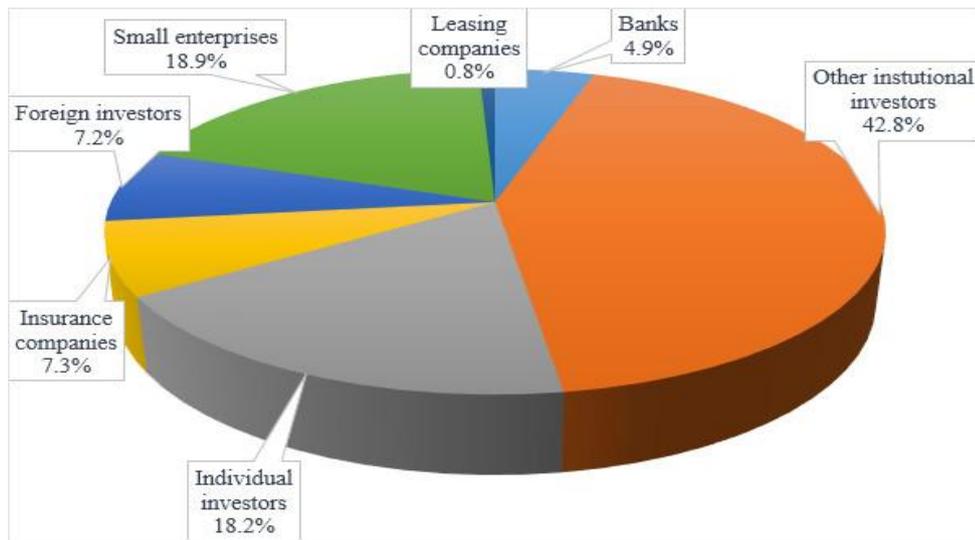
<sup>18</sup> Monthly bulletin of “Tashkent” RSE



**Figure 18 Structure of exchange turnover by sectors, 2015<sup>19</sup>**

Structure of market turnover depends on market participants of different spheres of economy. Share of financial sector in market turnover was 88.4% or 142.3 billion sums. Most active participants of the market were banks - 87.8% or 141.4 billion sums, insurance and leasing companies respectively, 0.9 billion sums and 0.03 billion sums. In 2014, the percentage of financial sector was about 90.3% or 88.1 billion UZS. Share of agricultural sector was about 7.4% or 11.8 billion sums and three times more than it was in 2014. At the same time industrial sector's share decreased up to 0.3% or 0.5 billion UZS, while share of constructive sector did not increase, but volume of turnover increased comparing to 2014.

<sup>19</sup> Monthly bulletin of "Tashkent" RSE



**Figure 19 Categories of investors at “Tashkent” RSE<sup>20</sup>**

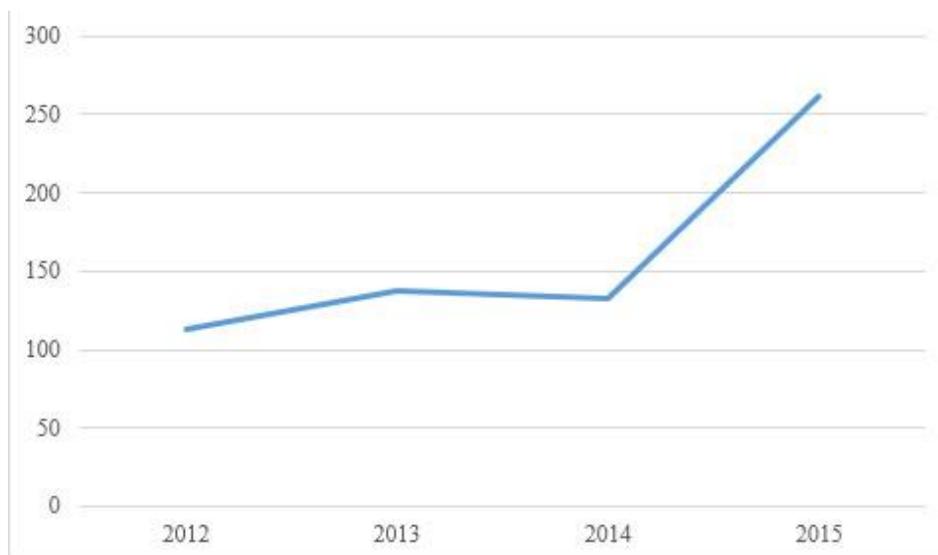
If we analyze categories of investors, it should be marked that most investors are large companies, banks, financial and non-financial organizations. 95.0 billion sums or 81.8% of market turnover belonged to these organizations. We can see slight decline in the number of individual investors, which decreased 4.12% than 2014. Using information given by “Tashkent” RSE majority of individual investors bought securities of commercial banks about 93.1%, constructive companies 1.1%, agricultural companies 1.6%, and insurance companies 0.8%. It means people trust securities of commercial banks comparing to other companies of the economy.

When it comes to institutional investors, they mainly trust their financial resources to financial sector mainly commercial banks, insurance and leasing companies. We can assume that there was slight decrease in the share of all sectors of economy comparing to 2014. One of the most important priorities of the exchange is to increase the role of individual investors in market turnover and strengthen trust of institutional investors to other sectors of economy.

Market share of foreign investors is also showing uptrend comparing to last years. When it comes to foreign investors, they are owners or shareholders of joint ventures in Uzbekistan. The percentage of foreign investors increased twice comparing to 2014 and 1.5% to 2013. It is planned to increase these outcomes in

<sup>20</sup> Source: Monthly bulletin of “Tashkent” RSE

the near future. Banks in this case participated as issuers of securities or suppliers of market. When it comes to investment, banks were not active as issuers. Share of banks as investors was 4.9% in 2015 and it was 35.4% in 2014. We can see sharp decline in attendance of banks as investors that was 7 times lower than preceding year.

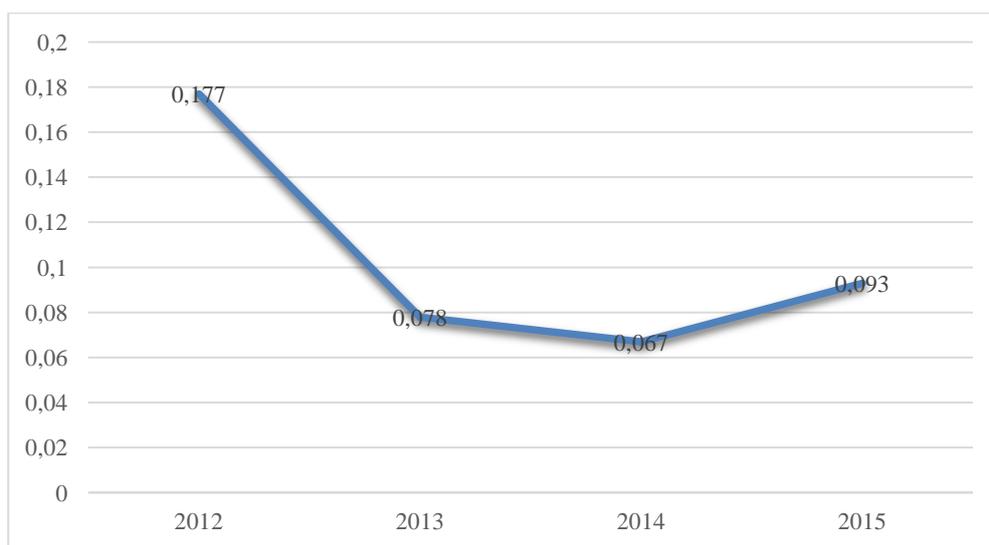


**Figure 20 Number of listed companies from 2012 to 2016<sup>21</sup>**

Since 2012, number of listed companies at “Tashkent” RSE have been showing gradual increase. The number of listed companies was 113 at the end of 2012, as 13 joint stock companies joined the list of stock exchange. In 2014, 31 joint stock companies were delisted and 26 new companies were listed. There have been tremendous growth in the number of listed companies and 261 companies were at the listing of stock exchange. Upswing in the number of listed companies results development of stock market.

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<sup>21</sup> Source: prepared by author using monthly bulletins of “Tashkent” RSE



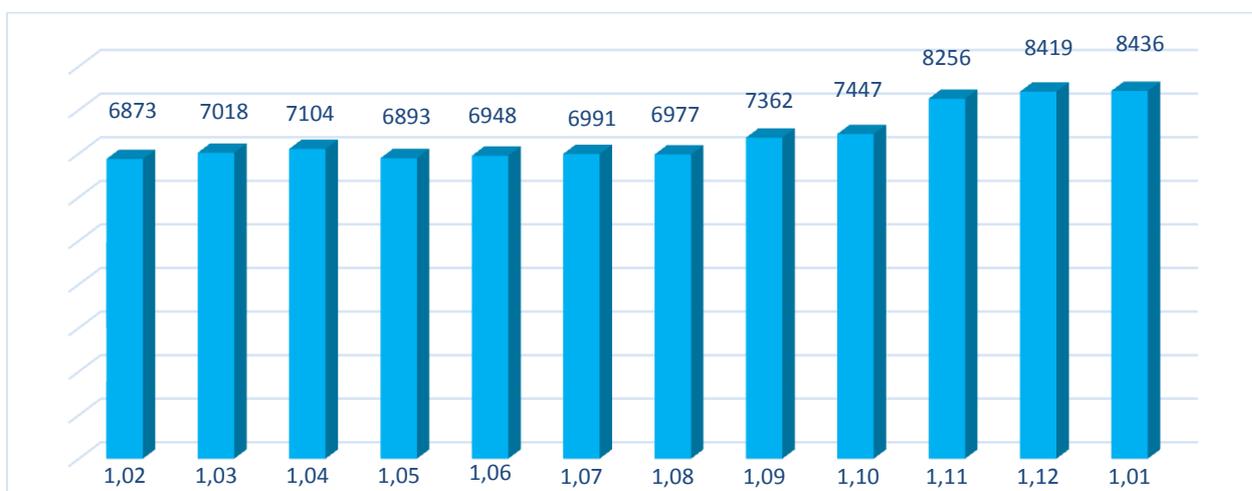
**Figure 21 Market turnover in relation to GDP<sup>22</sup>**

Turnover ratio in relation to gross domestic product shows scale of market for a specific time. When market scale is comparable to GDP it means securities market is well developed and involve all parts of economy. All products and services created in real economy is equivalent to financial sector. Securities market play as an intermediary to finance needs of individual and institutional participants. This indicator should be as higher as possible in practice. This indicator does not show actual development of securities, but quantity of development.

There was slight decrease in turnover ratio comparing to GDP. Increase in turnover of stock exchange should be comparable to gross domestic product. In our graph, we can see market turnover is much lower than GDP and cannot reach even to 1% of created GDP. In 2012, there was highest indicator because market turnover was high in relation to GDP rate. Highest degree was 0,177% in 2012 while lowest was 0.067% in 2014. It is said that market turnover reached to highest level of 4 years. If this trend continues market turnover to GDP rate also shows higher degrees. Besides growth rate of turnover ratio to GDP demonstrates higher shares when market turnover becomes even higher than current figures.

<sup>22</sup> Source: prepared by author using monthly bulletins of “Tashkent” RSE and President’s annual speeches about macroeconomic indicators and main economic priorities of the country

We formerly discussed the importance of market capitalization of listed companies. Using information given below, we try to discuss and make assumptions about it.



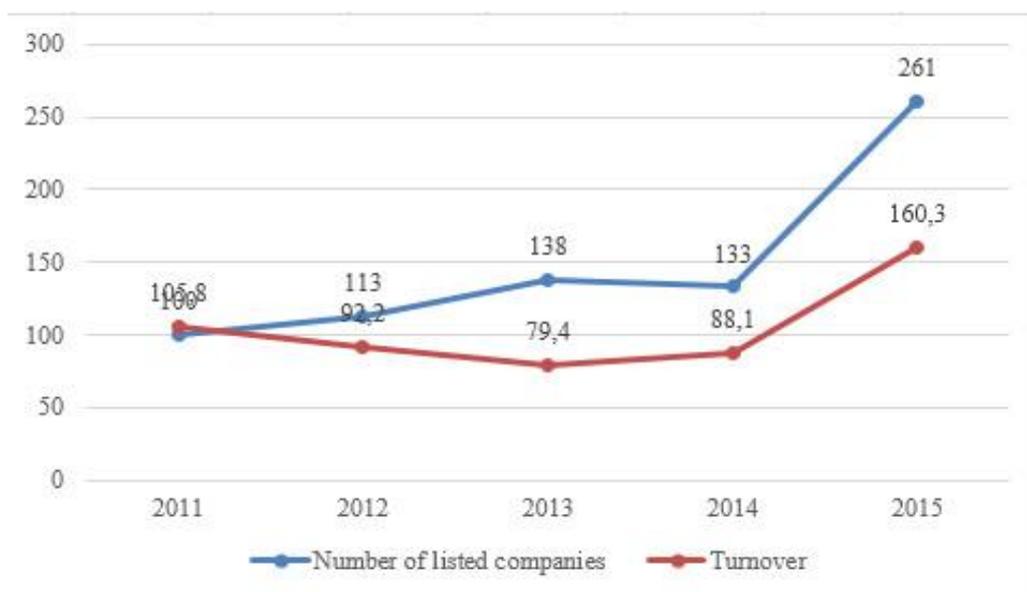
**Figure 22 Market capitalization of listed companies at “Tashkent” RSE<sup>23</sup>**

Market capitalization in absolute form is showing gradual increase. If market capitalization in 01.02.2014 was equal to 6873 billion sums, it increased up to 8436 billion sums at the end of 2015. Annual growth rate of market capitalization was 15.77% that was relatively inconsequential. At the same time, average growth in absolute form was equal to 7394 billion sums. If we compare results of 2015 to 2014, we can see slight fluctuation in the capitalization of listed companies. This fluctuated between 5900 and 6800 billion sums. Total volume of market capitalization of listed joint stock companies was about 71.2% of all participant entities.

Stock exchange entails listed companies series of requirements. These requirements are classified as categories “A”, “B”, “C” and “P”. The categories are divided according to minimum amount of share capital. If we analyze listed companies with these criteria, 24 joint stock companies are categorized as “A”, 28 of them as “B”, 177 companies as “C” and 32 of them as “P”. In this case, one of the common categories of listed companies is “C” that includes 177 joint stock companies. Category “C” involves the firms required share capital of which is

<sup>23</sup> Source: Monthly bulletin of “Tashkent” RSE

equivalent of 400 million USD. This share capital is valued using currency rate of Central bank of Uzbekistan.



**Figure 23 Turnover of listed companies<sup>24</sup>**

Stock exchange also evaluates turnover of listed companies to regulate their eligibility to listing requirements. As mentioned in previous parts, exchanges set series of requirements to ensure fairness and accuracy in trades. Financial and economic data of listed companies are monitored in a monthly basis. The firms that cannot meet listing requirements are delisted. It is important to observe the data as securities also try to keep their reputation. Earlier we discussed number of listed companies and their dynamics from 2011 to 2015. Absolute form of turnover belonging to 100 listed companies in 2011 was 105.8 billion sums, in 2012 92.2 billion sums of market turnover was made by 113 listed companies. Sharp decline in exchange turnover also affected turnover of listed companies which were 79.4 billion sums and 88.1 billion sums respectively. These decreased outcomes were performed by 138 in 2013 and by 133 listed companies in 2014. Significant increase in the number of listed companies resulted higher turnover volume comparing to last 5 years. Volume of turnover performed by 261 listed companies

<sup>24</sup> Source: Monthly bulletin of “Tashkent” RSE

was 160.3 billion sums in 2015. However turnover ratio per listed companies was slight insignificant.

### **Summary**

Forecasting price fluctuations in the market is quite complex process. It includes analyzing all market and other financial-economic factors. Technical and fundamental analysis is most basic and common analyzing methods. Fundamental analysis is a method of estimating fair value by examining economic, financial and other external and internal factors. It tries to analysis every factor that affects value of the security. Fundamental analysis is conducted by estimating financial ratios that give full information to the investors. Technical analysis is type of examination, which aims to find future price of certain securities and benefit from them. This analysis covers all market factors that affect market price. In order to benefit from future changes analysts use different charts and trends.

Macroeconomic determinants of securities market development are spheres or factors that directly affect development of stock market. In practice, banking sector development, insurance sector, income level, foreign portfolio investment and market capitalization determine development of stock market. Studying banking sector our country, this sector is deeply correlated with stock market. Banks have been playing as main participants of market and majority of market turnover is made by banks. Insurance companies also actively participate in stock market trades. When this sector develops like banking sector it will be most important factor for the market. Growth in income level, foreign portfolio investment and market capitalization now cannot outpace former two dominants though they will be as important as those factors.

Tashkent stock exchange is well developed; has professional employees and conducts international relationship with other world famous stock exchanges. TCI is composite index of listed companies in “Tashkent” RSE and show average price of securities for specified time. Value of index is comparatively low and fluctuates between 1000.00 and 1008.00. All indicators of the exchange are increasing

significantly. Especially market turnover showed sharp increase comparing last 5 years. Percentage and absolute form of secondary market are also demonstrating significant increase. Share of sectors other than banks is showing uptrend. Market capitalization and number of listed companies showed tremendous increase in 2015.

### **Part III. PRACTICAL PROBLEMS ON DEVELOPMENT OF SECURITIES MARKET**

Stock market in Uzbekistan is in the liberalization phase, which mainly attempts to attract private businesses to stock markets, implementing international standards to our developing stock market and participant companies. At the same time, there have been attempts to integrate into international stock markets and use modern technologies to facilitate trades effectively and accurately. Securities market in Uzbekistan is gradually developing sector. Since privatization process began, stock market started its activity as independent subject of economy. In this stage securities market played as most important method of privatizing state owned companies. Companies currently address this market to get adequate flow of capital from other sectors and benefit from it.

However, several problems directly affect development of securities market and prevent further developments. We try to consider furthestmost important and controversial problems. Most significant and profitable businesses still owned by the government so investors of these firms are usually other larger government or private companies. Primary markets in Uzbekistan are well formed and adequately committing its functions, but we cannot say the same about secondary markets. When securities are placed into primary markets, they stop moving and usually investors do not resell them at secondary markets. Furthermore, some joint stock companies are not able to generate excessive net profit to be allocated to dividends. Most companies offer lower dividend rates for this reasons investors are avoiding to buy these kinds of company shares. Hence, dividend policy should be priority of companies and managers. For further development of securities market, high efficient and profitable companies should be more than average and dividend policy must be developed.

In practice, majority of companies use paper based financial accounting, which cannot meet the requirements of international accounting and auditing standards. Besides, lack of corporate governance also affects securities market. Because effective corporate governance seeks professional manager who can

increase profits by participating in securities market and forming optimal investment portfolios. One of major problems of stock market is that market is not integrated to world stock markets. Though stock exchange has bilateral agreement with other stock exchanges especially, relationship with Korean stock exchange is significant.

Some of the fundamental problems affecting securities market are existence of great number of illiquid securities, trading volume is dominated by few companies, trading is facilitated by number of brokerage firms and dealers, and stock market lacks international professional employees. Last point to consider is trading is not transparent enough; it means database about issuers is not accessible.

Privatization is key factor for developing securities market. With the help of privatization government properties are sold or allocated between subjects of the economy. When privatization stage completes market becomes liberalized and start to function as self-regulatory organizations. It should be noted that most profitable companies still belong to government. Majority of shares of these companies are hold by government organizations. As we can see most banks and huge joint stock companies actively participating in exchange trades are partly owned by the government. These companies pay off the higher returns and risk is lower than other privately owned companies. We can only assume that when shares of these companies directly offered to general public secondary market also develops and attendance of public increases.

EL SIS savdo was established with the initiative of National bank of Uzbekistan to promote barriers free and easy over the counter market as an equivalent to "Tashkent" RSE. Over the counter market of Uzbekistan is EL SIS savdo which scale involves only a few companies and brokerage houses is not common among traders. Since strengthening of privatization stage this market became more common than it was used to be. 2-4 years ago if overall turnover was 1-2 billion sums, today it grow to about 7 billion sums. The market involves small businesses and companies that are not able to meet listing requirements, such as medium sized Uzbek bazaars, retail markets and small industrial companies.

Turnover of that firms are not high as listed companies of Tashkent stock exchange. When privatization stage completes successfully turnover of ELSIS savdo will also increase and will be fastest and most efficient market to participate. Involvement of more firms leads to the increase in turnover of the OTC market.

Accounting and auditing information reflects financial and economic condition of firms and widely required by the government, regulatory bodies, professional organizations and general public. There occurs conflicting situations for the company. In order to meet these requirements accountants and auditors prepare single formed financial reports and statements that present complete picture of the company performance. Created single set of accounting and auditing standards allows financial information of specific firms to compare with other firms. Since the adopted decree of the president “Tashkent” RSE requires listed companies internationally recognized auditing and accounting standards. Related problem is widely accepting international standards of auditing and accounting. However, majority of companies use national standards of auditing and accounting. Accepting international standards require extra expenses and hire professionals who can cope with them.

Experts say development of secondary market leads Uzbekistan towards advanced stock market. Secondary market involves not only companies but also individual investors. They own adequate financial resources that can supply shortages of companies. These days individual owners or savers keep their money in the bank deposits or under their “pillow”. This is most controversial problem of our economy, because most people lost their faith in financial organizations. As economists understand Soviet Union gathered financial resources of individuals and gave government bonds in return. Huge number of promises was given and individuals expected greater returns in the future. Collapse of that union resulted lost financial resources of the individuals. Since then majority of individuals avoid channeling their resources into financial organization. However there is increase in the number of accumulated deposits and attendance of individuals in financial

markets. This problem is going to be fixed in the near future by increasing people's trust in financial system.

Furthermore individual investors lack information about how stock market performs its activities. Lacking the information the investors do not take risk to participate and just hold their savings on real economy or save in bank deposits. It is advisable to provide professional consulting services to individual investors who are not aware of how to participate in exchange trades. Advertisement at media also increases awareness of public. It is advisable to advertise huge companies and their activities as a point of investor's view. This attracts individual investors who are willing to spend their savings on procurement of companies' securities.

Secondary market is a symbol of development of securities market. One of the problems related to secondary market development is dominance of few banks on it. When securities are offered to public at primary market, they stop moving towards secondary market. Initially offered securities are resold at secondary market by banks. These days Tashkent stock exchange is aiming to develop secondary market and increase involvement of institutional and individual investors. For this matter it is advisable to deepen privatization process.

Most remarkable event for development of securities market was held in August, 2011 to sign an agreement between Korean stock exchange and "Tashkent" RSE aiming to develop bilateral relationship between these exchanges. Korean stock exchange is now working on the development of automated trading system at "Tashkent" stock exchange. It was assigned in agreement that Korean stock exchange must provide automated system and after that the State committee of the Republic of Uzbekistan for privatization, demonopolization and development of competition gives 1% of shares of the exchange. It means Korean stock exchange owns 25% of shares of "Tashkent" stock exchange.

Automated system provides efficiency of the exchange together with accurate and fast method of trades. Modernization of stock exchange includes applying internationally accepted automated trading systems, changing appearance and functions of official website of Tashkent stock exchange and help to integrate into

developed stock exchanges by automated system. Automated trading system helps to accelerate trading process and increase efficiency of auction trading. Automated auction trading aims to match sell and buy orders at fastest way. Automated trading system helps the quality of trades, but developing stock market not only dependent on this factor.

Transparency ensures fair trade and provides confidence in market. Information must be easy to find and new market signals must be based on relatively low costs. Uncertain market performances may reduce investment rate and faith in exchange reputation. Tashkent RSE is quite transparent to its members and each member can access information about issuers and market makers. When it comes to other stakeholders other than exchange members, it is a bit harder to find proper information. In general, official website of “Tashkent” RSE should ensure availability of information to others, but site lacks such quality. Most pages do not reflect information only blanks. Potential investors cannot get information unless they go to the exchange. For example, world famous stock exchange New York stock exchange provides real time financial or other price information and it is updated in a daily basis. It is recommended “Tashkent” RSE to ensure availability of proper information to non-members.

Another basic problem related to transparency is financial reports of listed companies is not publicly available on official website. In practice, official website of stock exchanges provides financial and economic condition of companies by requiring them to fill series of forms. Fundamental analysts seek this kind of information on official websites to make accurate assumptions about the firm. World famous stock exchanges not only provide financial reports but also financial ratios for fundamental analysis. These days Tashkent stock exchange also trying to solve this problem. Stock exchange is expected to publish financial and economic database of listed companies. This change also leads to increase in the number of investors or in economic term buy sides.

In the developed economies companies search for the exchange which offer relatively low transaction costs. High costs of transactions affect decisions of

investors whose aim is to minimize expenses and increase their profits. For issuers who are initially offering their securities have to pay series of fees and commissions. Such as issuers pay underwriting costs for banks who offered their services, legal service fees, brokerage commissions, cost for the preparation of prospectus, together with listing fees, application fees and annual fees which are directly paid to the stock exchange. In our exchange these costs are relatively high. Small enterprises and retail companies are not able to meet these costs thus address brokers. The brokers fill the order at over the counter market. Transaction costs of OTC market are comparatively lower than the exchange. Decreasing transaction costs at the exchange attracts potential investors. When majority investors address the exchange they compensate decreased transaction costs.

Foreign investors also search for the exchanges with relatively low transaction costs and commissions. Foreign individual or institutional investors compare the costs and decide on exchanges with low costs. Lower transaction costs attract both buy sides and sell sides at stock exchange.

For developing economies foreign investment play as key factor to the development of financial markets. Foreign investment can be directed to economy as foreign direct investment or portfolio investment. Foreign direct investment (FDI) does not need attendance at equity market. Portfolio investment is accomplished at specialized exchanges where portfolio is formed using local securities. Portfolio investors usually look for the securities which yield higher returns and the risk is comparatively low. In developing countries like Uzbekistan investors enjoy stable price movements and low exposure to the risks. Furthermore, tax on capital gains in Uzbekistan is relatively low 10%; compared to other emerging economies this is more profitable to invest local businesses. At the same time to mention about privileges, the exchange gets; the attendance of foreign investors' increases market liquidity, reduces trading costs and the cost of share capital to listed companies. Notably, higher turnover enhances profitability of hosting exchange, enables investment in exchange infrastructure and extension of exchange services.

Excessive number of barriers to individual investors and foreign investors prevent further development of stock market. In practice all listed stocks must be available to both national and foreign investors. Our stock exchange lacks foreign investors who are willing to participate in trades. These days this problem is going to be fixed according to the decree of the president which is mentioned in previous parts. It articulates to attract foreign capital to joint stock companies and sell up to 15% of securities to foreign investors. However portfolio investors only can buy 10% of offered shares of specific public company. For this purpose, the stock exchange is likely to provide transferability of dividends and interest payments to the foreign investors. Efficient settlement and remittance ensure effective market performance.

Dividend is main factor to decide on buy or sell securities. When company offers lower returns investors try to get rid of the securities, or they try to buy as company offer high yields. That is why dividend determines performance of the firm's securities. Dividend is allocated when company generates adequate profit after deduction of taxes and compulsory payments. Listed companies are required to make enough profit to be allocated to dividends. When company does not make profit allocated to dividends they delisted.

One of the priorities of local firms should be working on enhancement of dividend policy. Dividend policy should reflect interest of shareholders and ensure return on their assets. In most corporate structures dividend policy is as important as strategy of the company and guarantee rights of shareholders. This policy involves portions of dividend allocation, payment date of dividends, conditions of dividend payments, rights of shareholders regarding to dividends, and other factors related to dividend activities.

One problem associated with dividends is allocation of dividends. On annual shareholders' meetings dividend apportionment is not estimated as important matter. When company generates excessive profit, it usually channeled to widen its business position. As a result, shareholders get nothing except minor amount of dividend. Furthermore, dividend payment process is also problematic condition.

Sometimes it is hard to search shareholders with small amount of shares and company does not take interest to find them and pay off its obligation.

Dividend policy and corporate governance become one of the major issues of our economy. As mentioned in previous parts, Presidential Decree on implementation corporate governance in joint stock companies made those matters as priorities. Since the adoption of this decree joint stock companies must enhance their corporate governance and dividend policy. Developed dividend policy takes interests of both local and foreign investors. Local investors also try to buy shares of companies which have compatible dividend policy. As we know foreign investors aim to buy shares at lower costs and increase their invested value in the future. Foreign investors buying local shares enjoy high returns and company enjoys foreign currency flow and diversified investors.

Implementation of corporate governance in developing countries like Uzbekistan is primary step to strengthen property rights of shareholders, development of corporate structures, provide accountability and transparency to shareholders and other stakeholders. Corporate governance is a way to manage modern type of joint stock companies and it is also beneficial to state owned enterprises, small businesses and family businesses. Applying principles of corporate governance benefit both shareholders and managers which ensure transparency of corporate activities. There have been attempts to implement corporate governance in national joint stock companies, because it has several advantages for companies, shareholders and national economy. Let's try to analyze these factors to understand core feature of applying this system. Corporate governance improves access to securities market, strengthens internal control over the firm, increases investment potential of the companies and enhances ability of attracting foreign and local investors. Corporate governance seeks good managers who are able to cope with different situations. The managers help to widen business value of the company, establish valuable dividend policy and try to generate high profit margins. In this case company managers participate in

securities market to increase profits from financial activities. They form optimal structure of portfolio investments and diversify risk exposure.

Performance of managers is one of the facts that directly affect decisions of investors. Investors seeking profitable business start analyzing act of company managers. It is common point that good managed businesses have higher market values and lower exposure to the risks. Especially fundamental analysis reflects act of managers and by estimating different ratios performance of business management is valued. Furthermore it is clear that if company does not have strong corporate governance activities capital will flow away from the company.

Good governance ensures shareholders' rights and increasing their benefit becomes main priority of business. Besides, optimal governance provides shareholders with confident disclosure to keep financial resources in the company. Commonly accepted principle states that when company does not provide investors with fair disclosure capital will flow away from the company. Poor corporate governance increases risk of corruption and fraud which lead to corporate failures in the country. Investors avoid involving in such poorly governed companies and capital flows out from the company.

Auditors are intermediaries who confirm reliability of financial and economic performance of the company. In corporate governance auditors play important role as managers of the firm. Together with external audit, internal audit also established to effectively control over the firm. Mentioned disclosure matters are endorsed by auditors. Applying international accounting and auditing standards help companies provide comparability of their performance with other foreign companies and investors get internationally accepted or reliable reports. If company lack good accounting and auditing principles, capital will flow away from the company.

Corporate governance also benefits macroeconomic condition of the country. Good corporate governance attracts foreign and local investors to securities market and helps to diversify risks properly. International organizations also consider performance of corporate governance in the whole enterprises to allocate financial

resources to the economy. Positive implementation of corporate governance is a sign of economic growth in the country. Corporate governance leaves traditional method of governing the company and leads to better outcomes. Positive governance helps the companies overcome financial downturns by proper decision making.

### **Summary**

Securities market is developing sector of economy since the privatization stage become prominent matter to consider. However stock market is facing some basic problems related to the development. Most important problems include profitable businesses owned by the government so investors of these firms are usually other larger government organizations; interests of individual investors are limited at this point, secondary markets are not well developed and only include huge banks.

Some of the vital problems affecting securities market are presence of great number of illiquid securities, trading volume is dominated by few companies, trading is facilitated by number of brokerage firms and dealers, and stock market lacks international professional employees. Trading is not transparent enough; it means database about financial and economic is not publicly available.

Corporate governance and developing dividend policy are becoming furthestmost issue of our economy. Implementation of corporate governance to local joint stock companies increase business value and competitive advantages of national firms. Most importantly this type of governance system directly affects the development of financial markets and risk management problems.

## CONCLUSION

Securities market is an independent intermediary of financial system where different types of securities are bought and sold among participants of economy complying with supply and demand law. Securities market has several privileges like providing economic subjects with efficient and low-cost financial resources, help to diversify financial assets of subjects, channel resources from excessive sphere to lacking, transferring risks of financial intermediaries, increasing GDP per capita, and other important matters.

We can conclude from the work that:

- stock market in Uzbekistan is in liberalization phase, which aim to increase share of private businesses in market turnover;
- securities like stocks and bonds are actively traded in Tashkent RSE; however market lacks derivative contracts in practice
- positive relationship between stock market and economic growth is very important issue that emphasizes need to the development of securities market in Uzbekistan;
- stock market regulation in Uzbekistan conducted by governmental organizations and regulation includes enforcement of regulative and normative acts to the participants of securities market and ensuring accurate functioning the market;
- fundamental and technical analysis can be implemented to our stock markets when secondary market develops and market prices of securities change continually according to law of supply and demand;
- main factor affecting stock market development is banking sector that dominate in market turnover and secondary market. Most active participants of the exchange are commercial banks. For developing countries like Uzbekistan, banking sector development is important to create efficient stock market, in first stage banks dominate in financing the needs of economic entities. After stock market develops, it starts to compete with banks as cheapest way of financing;
- role of insurance companies in stock market development is comparatively low;

- income level and foreign portfolio investments are minor factors that affect stock market;
- capitalization of listed companies are gradually increasing compared to previous years, however capitalization to GDP is relatively low;
- there have been attempts to attract foreign capital to develop securities market and increase attendance of foreign investors in exchange trades;
- share of corporate bonds in secondary market is growing and development of corporate bond market will play important role in the future;
- factors of quantity like market turnover, number of listed companies in Tashkent stock exchange are slightly showing uptrend;
- implementation of corporate governance directly influence stock market performance in the near future;
- foreign investors may take advantage tax privileges by participating in Tashkent RSE comparing to other developing economies;
- there are problems related to transparency of exchange trades at Tashkent RSE. It is slight difficult to find appropriate information about financial and economic information of listed companies;

By analyzing securities market in Uzbekistan, we made following proposals as solution to the current problems:

- developing secondary market and strengthen functioning of it;
- deepening privatization of government assets;
- promoting financial liberalization as a part of economic reforms;
- continuing current policy towards integration of Tashkent RSE into developed stock exchanges;
- constantly improving normative legal acts related to securities market regulation;
- enhancing corporate governance at joint stock companies in Uzbekistan and implying best foreign experiences on it;
- increasing interests of both foreign and local investors, and encouraging attendance of them at stock trades;
- inspiring market research incentives to innovatively develop the market;

- making dividend policy as priority of joint stock companies;
- strengthen disclosure based regulation system in Tashkent RSE;
- ensuring transparency of exchange trades and making exchange information publicly available;
- involving most liquid companies at exchange listing;
- implication of derivative contracts in stock exchange must be considered.

Perspectives of development securities market in Uzbekistan involves wide range of issues that emphasized in our work. Through our findings, we made proposals and alternative solutions to the current problems on securities market development. We hope securities market in Uzbekistan will be developed in near future and commit all functions without disruption.

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