



**ST. MARY'S UNIVERSITY**

**SCHOOL OF GRADUATE STUDIES**

**FACTORS AFFECTING STOCK MARKET GROWTH: IN  
THE CASE OF ETHIOPIA STOCK EXCHANGE**

**A Thesis Submitted to St. Mary's University, School of Graduate  
Studies, for The Partial Fulfillment of the Requirement for  
Masters of Art Degree in Business Administration**

**BY:**

**SILESHI GEZAHEGN - SGS/0098/2010A**

**ADVISOR:**

**ABRAHAM G/GIORGIS (Assistant Professor)**

**JUNE, 2021  
ADDIS ABABA, ETHIOPIA**

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## DECLARATION

I the undersigned, declare that this thesis is my original work, prepared under the guidance of Abraham G/Giorgis (Assistant Professor). All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

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**June, 2021**

## **ENDORSEMENT**

This thesis has been submitted to St. Mary's University College, School of Graduate Studies for examination with my approval as a university advisor.

**ABRAHAM G/GIORGIS (Assistant Professor)**

Advisor

**St. Mary's University College, Addis Ababa**

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Signature

**June, 2021**

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## Acronyms

ASEA: African Securities Exchanges Association

FDI: Foreign Direct Investment

GDP: Gross Domestic Product

ICT: Information Communication Technology

NBE: National Bank of Ethiopia

NYSE: New York Stock Exchange

OLS: Ordinary Least Squares

WFEs: World Federation of Exchanges

NEDO: National Economic Development Office

QP: Quality Performance

SPSS: Statistical Packages for Social Sciences

## Abstract

*Stock market success in any country is a convincing point of reference in a general economic performance and is an integral part of the economy of any country. Free and open economic policies and advanced technology introduction, parties in the sector are realizing uncomplicated means of approach to stock markets around the world. The reality that stock market indices have become a directive of the health of the economy of a country indicates the significance of stock markets. In Ethiopia stock market growth is a potential major problem that may face the Ethiopia stock exchange, and it is notable that there is lack of a consensus of the effect of stock market exchange, on stock market growth. This study is carried out to investigate factors affecting stock market growth: in the case of Ethiopia stock exchange. The study adopted descriptive survey research in order to achieve its specific objectives. The research examined independent variables (regulatory framework, technology, corporate governance, and capital inflow) against dependent variable (stock market growth). The data for the study was collected using self-administered questionnaire from a sample of 181 respondents selected using proportional stratified simple random sampling techniques from the target population of share company managers, government officials, employers and shareholders in the selected private organization at different level, principal persons and respective staffs with 95% confidence level and an error of 0.05. The relationship proposed in the framework were tested using Pearson correlation, and the causal relations were analyzed using regression analysis. From the result of the analysis, it is concluded that there is the fact that independent variables (regulatory framework, technology, corporate governance, and capital flows) have a positive and significant influence on dependent variable which is used to determine factors affecting stock market growth: in the case of Ethiopia stock exchange, and the sector has influenced by independent variables significantly.*

**Keywords:** *Stock exchange, Stock market growth, Regulatory Framework, Technology, Corporate Governance, Capital flows*

## CHAPTER ONE: INTRODUCTION

This topic begins with a brief background to the study, which leads to an introduction of the stock market exchange, and briefly describes statement of the problem of the study, research question, objective of the study, significance of the study, scope of the study, delimitation of the study, limitations of the study, basic assumptions of the study, and organization of the study then be presented.

### 1.1 Background of the Study

From the feudal economy, to the socialist system - Derg, and the current market economy, Ethiopia had passed through different economic and political changes. The government, since 1991, tried to take significant steps to liberalize the financial sector. However, the financial sector remains relatively small, closed and less developed even when compared to its neighboring countries (Alemneh, 2015; Reucker, 2011). The country has opened its doors to previously closed sectors of the economy to foreign investment, although sectors such as financial services and power generation are still off limits. Following the liberalization of the economy many companies have been formed in different forms, the majority of whom are in the form of private limited companies, while a lot others are formed through selling of shares to the market.

A growing economy like Ethiopia needs investment on a continuous basis for new ventures as well as for expansion and modernization of existing productive capacity. Therefore, to sustain the annual GDP growth, the country needs new investments, in other words, it needs capital to invest. Capital markets provide one means to raise capital, as capital markets mobilize savings for investment. Therefore, capital markets are essential for the country's overall economic growth. According to (Reucker, 2011), since the abolition of the Addis Ababa Share Dealing Group in 1974 by the military government ruling Ethiopia at the time, no stock market has been in place in Ethiopia. The need for stock exchange market development has, however, been continually discussed by various groups/stakeholders and academics. Accordingly, various studies have been carried out by these groups to initiate the establishment of capital market in the country. For example, the study conducted by (Reucker, 2011; Tessema, 2003; Teklay, 2011), are among those in support of establishment. Treasury bills are the only active primary securities used in Ethiopia, and secondary markets still do not exist at the moment. Long-term securities such as bonds are occasionally issued by the NBE to finance government expenditure and/or to absorb excess liquidity in the banking system.

A capital market is vital to mobilize huge capital, improve financial access to private sector, and improve liquidity and risk sharing in an economy. Hence with the emergence of capitalism, many countries around the world have been moving toward market-oriented economies and securities markets sprang up recognizing their significance in an economy (Tessema, 2003; Teklay, 2011). Scholars and researchers also reveal that there exists a positive correlation between economic growth and capital market development (Beck *et al*, 2006; Bose, 2005).

In a study made by the African Union on the establishment of the Pan African stock exchange (ASEA, 2012), stock exchanges are said to have a reputation for encouraging greater economic dynamism and producing higher levels of wealth by providing investors with the opportunity to share the risks and profits of enterprises. Thus, they improve market mechanisms in order to raise and allocate scarce financial resources, mobilize local capital, attract foreign direct investment and allocate resources to projects likely to be beneficial to the economy. The stock exchange is an alternative means for securing capital helping governments and private sectors to mobilize capital to finance a wide range of infrastructure thereby satisfying social needs as well as economic growth and jobs. Stock markets are perceived as a tool for the promotion of the financial sector and the development of private savings, thereby supporting the non-monetary funding of the economy and the fight against inflation.

This study was carried out to weigh up factors affecting stock market growth: in the case of Ethiopia stock exchange, by means of a literature review and a questionnaire survey, and will adopt descriptive survey research to achieve its specific objectives which are; to determine how regulatory framework influence stock market growth in the case of Ethiopia stock exchange; to study how technology influences stock market growth in the case of Ethiopia stock exchange; to investigate how corporate governance influence stock market growth in the case of Ethiopia stock exchange; to assess the influence of capital inflows on stock market growth in the case of Ethiopia stock exchange.

## **1.2 Statement of the Problem**

The performance of the stock market in any country is a strong indicator of general economic performance and is an integral part of the economy of any country. With the introduction of free and open economic policies and advanced technologies, investors are finding easy access to stock markets around the world. The fact that stock market indices have become an indication of the health of the economy of a country indicates the importance of stock markets. This increasing

importance of the stock market has motivated the formulation of many theories to describe the working of the stock markets (Gupta, Chevalier and Sayekt, 2008).

Over the last decade there has been a significant growth in the number and size of stock markets in Africa. For example, the number of active African stock markets increased from 5% in 1960 to 18% by the end of 2006 (Ntim, Opong, Danbolt and Dewotor, 2011). Currently, there are 29 formal stock markets in Africa, and with further proposals to open new ones in a number of African countries (Moin, 2007; Databank Group, 2008; ASEA, 2012). The apparent substantial increase in stock markets in Africa can be attributed to the extensive financial sector reforms undertaken by a number of African countries (John and Benjamin, 2006).

However, despite the rapid growth in the establishment of stock markets in Africa, with the exception of South Africa, stock markets in Africa not only remain comparatively different from their developed counterparts, but also, pale into insignificance in comparison to other emerging markets (Alagidede, 2009; Ntim *et al*, 2011). First, they are small in size (Ntim *et al*, 2011). The total value of African stocks outside of South Africa was only 0.94% of world stock market capitalization, and 2.14% of all emerging markets stocks at the end of 2011 (World Federation of Exchanges (WFEs, 2012).

Recently there are studies conducted in Ethiopia related to stock market exchange by (Alemneh, 2015; Teklay, 2011; Tessema, 2003; Wale, 2012; Mulatu, 2016; Gashu, 2017; Gizachew, 2019) that focus on the challenges and prospects of establishing stock market in Ethiopia. Among not mention in above heading, (Mulatu, 2016) study aimed at identify factors that affect the development of stock market such as macroeconomic development, government reaction towards stock market investment, financial sectors development. His findings depict that an authorized institution and legal infrastructure is not in placed yet to operate stock market thus far. Given these findings, he concluded that establishing stock market under the current situations of development of key institutional and legal infrastructures is unlikely in Ethiopia.

Therefore, it is notable that there is lack of a consensus of the factors affecting stock market growth in the case of Ethiopia stock exchange, and there exists little or no literature on the factors affecting stock market growth in Ethiopia, thus this study helps bridge the knowledge gap that exists in this area of study. While stock market growth has inspired literally thousands of academic studies, only a few empirical studies of stock market growth have been carried out. Nevertheless, this study adds

to the growing literature on the Ethiopian stock market growth by examining the factors affecting stock market growth.

### 1.3 Research Questions

In order to achieve the intended objectives of the study and to address the research problem, the major research question for this work is:

§ What are the factors affecting stock market growth: in the case of Ethiopia stock exchange?

The major question would be further divided into two sub research questions in order to reach the specific aims of this paper. The research questions were:

- What is the influence of regulatory framework on stock market growth in the case of Ethiopia stock exchange?
- To what extent do the technology influence stock market growth in the case of Ethiopia stock exchange?
- How does corporate governance affect stock market growth in the case of Ethiopia stock exchange?
- How does capital inflows influence stock market growth in the case of Ethiopia stock exchange?

### 1.4 Objectives of the Study

#### 1.4.1 General Objective

The main objective of the study was to weigh up factors affecting stock market growth: in the case of Ethiopia stock exchange. Furthermore, the objective has delivered a conclusion on critical feedback to the sector and provided a decision-making process in the stock market growth at the Ethiopia stock exchange.

#### 1.4.2 Specific Objectives

This study has believed to attain the following objectives specifically;

- ∅ To examine the effects of regulatory framework on stock market growth in the case of Ethiopia stock exchange;



- ∅ To investigate the technology influence on stock market growth in the case of Ethiopia stock exchange;
- ∅ To investigate the effects of corporate governance on stock market growth in the case of Ethiopia stock exchange;
- ∅ To examine the influence of capital inflows on stock market growth in the case of Ethiopia stock exchange;

### **1.5 Significance of the Study**

The main significance of this study is to analyzed factors affecting stock market growth: in the case of Ethiopia stock exchange, and the findings would help and inform policy makers that have implications on stock market exchange which helps them to be in better position to formulate, design and implement policies that would ensure the stock market growth in the country stock exchange, and further it would also help to provide critical feedback to the sector. In general, this study will be significant to three parties whom are academicians, government authorities and the general public.

### **1.6 Scope of the Study**

There are many methods for selecting participants, and the type of sampling depend on how you would use the information. Since this research focused on to identifying factors affecting stock market growth: in the case of Ethiopia stock exchange; and the study selected share company managers, government officials and share company share dealers that will draw from different national organizations who provided the best information in the study case area, and they are highly exposed to stock market exchange. Hence, data for this research were collected from share company managers, government officials and share company share dealers that will draw from different national organizations, and selecting all these participants purposively to get the best information in the study area.

The study would evaluate the Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, corporate governance influences on stock market growth, and Capital inflow influences on stock market growth in Ethiopia for a period of four years from 2017 to 2021.

## **1.7 Limitations of the Study**

The study would be centered in major sector related areas inside Addis Ababa, Ethiopia, and therefore its findings are applicable in Addis Ababa, Ethiopia only and other countries in Ethiopia that have similar characteristics. Therefore, the findings may suffer from generalization since the county may not be a significant representation of all the countries in Ethiopia.

The accuracy of the results would be limited to the extent that the respondents would be accurate and honest with their responses. The reliability of the findings would therefore depend on the information provided by the respondents.

## **1.8 Organization of the Study**

The study was organized into five chapters. Chapter one contains the background of the study, statement of the problem, purpose of the study, objectives, research questions, significance of the study, limitations, delimitations, basic assumptions of the study and the organization of the study. Chapter two is the literature review and the chapter will also present a theoretical and conceptual framework showing the variables and the various indicators. Chapter three outlines the research methodology which would be used in the study and includes research design, target population, sample size and sampling techniques, sample size, sampling techniques, research instruments, questionnaires, validity of the instruments, reliability of the instruments, and finally piloting of the research instruments. The study would also present the operationalization of variables table. Chapter four shall present analysis, presentation and interpretation of data while chapter five entailed summary of findings, discussions of findings, conclusions, recommendations and suggestions for further studies.

## **CHAPTER TWO: REVIEW OF RELATED LITERATURE**

### **1.1. Introduction**

This section covers review literature of different scholars and authors that have been reviewed in the area of construction projects with special focus on factors affecting quality of construction projects. It deals with both theoretical and practical findings of various researcher's concepts related to quality, quality in construction projects and factors affecting quality of construction projects. It deals with the review of related literature gathered from different secondary sources such as published books, articles and related websites. In this regard, efforts were exerted to include as much significantly related literatures as possible by reviewing available documents that exhibits points, targeting at the attainment of the research objectives.

### **1.2. Theoretical Review**

Theoretical review is the theoretical foundation of a study. A theoretical research has its findings based on existing theories and hypothesis; there is no practical application in the research, while an empirical research has its findings based on the verification through experiments, experiences and observations. This study is founded on both theory and empirical literatures. Ensuing are the theories upon which this study is founded upon.

#### **1.2.1. Technology Diffusion Theory**

This theory was developed by (Rogers, 2003) and identified technology diffusion as a process in which an innovation is communicated through certain channels over time among the members of a social system". In a study on stock market growth in sub-Saharan Africa, (Yartey and Adjani, 2007) proposed that the adoption of a robust electronic trading system and a central depository system among others are key preconditions for addressing the prevalent problem of liquidity as these stock exchanges seek regional integration.

(Rogers, 2008) analyzed adoption of ICT in the New York Stock Exchange (NYSE) and concluded that the NYSE invested in ICT to create new resources for advantage and to enhance existing resources. According to the study, ICT provides for efficient trade executions and adequate trading capacity, ensures a high-quality securities market and reduces labor expenses and the demand for physical space. (Levine, 2009) proposed that stock market liquidity ability to trade shares easily which is facilitated by ICT play a key role in economic growth. (Clemons and Weber, 2010) examined the 1986 Big Bang reforms of the London Stock Exchange and argued

that the adoption of ICT and the exchange's new screen-based market were a strategic necessity.

### 1.2.2. Law and Finance Theory

Law and finance theory focuses on the role of legal institutions in explaining international differences in financial development (La Porta, Lopez-de-Silaanes, Shleifer, and Vishny, 1997, 1998, 200a). The first part of the law and finance theory holds that in countries where legal systems enforce private property rights, support private contractual arrangements, and protect the legal right of investors, savers are more willing to finance firms and financial markets flourish. In contrast, legal institutions that neither support private property rights nor facilitate private contractual arrangement inhibits corporate finance and financial development. The second part of the law and finance theory emphasizes that the difference legal traditions that emerged in Europe over previous centuries and were spread internationally through conquest, colonization, and imitation help explain cross-country differences in investor protection, the contracting environment, and financial development today.

Many researchers showed that the institutional environment had an important impact on the functioning of the financial sector (Tressel and Detriagiache, 2008; Demetriades and Fielding 2009). La Porta (La Porta et al, 1997 and La Porta et al, 1998) argued that legal Origin determined the level of financial development. Moreover, common law-based systems, originating from English law, were better suited for development of financial markets than civil law systems. Common law has been instrumental in protecting private property than civil law, which aims at addressing corruption in the judiciary and improving the power of the state.

A legal and regulatory system involved in protection of property rights, contract enforcement and good accounting practices has been identified as essential for financial development. (La Porta et al, 1997) argued that the origins of the legal code significantly influence the treatment of creditors and shareholders, and the efficiency of contract enforcement. Others, such as Mayer (2001) emphasized that regulations concerning information disclosure, accounting standards, permissible banking practices, and deposit insurance do appear to have material effects on financial development. (Levine and Beck, 2000) examined whether the level of legal and regulatory determinants of financial development influences the development financial intermediary part.

La Porta et al(1997) argued that the national legal origin (whether English, French, German, or

Scandinavian) strongly affects the legal and regulatory environment in financial transactions and explains cross-country differences in financial development. (La Porta et al, 1997; Levine, 1998) reflected those low levels of shareholder rights are associated with poorly developed equity markets (especially in French civil law countries). In contrast, common law countries have high levels of shareholders' rights with correspondingly high levels of equity market development (Caprio et al, 2003), and that greater creditor rights are positively associated with financial intermediary development.

According to (Besides, McDonald and Schumacher, 2007) financial liberalization, stronger legal institutions, legal origin, lower inflation, and increased sharing of information as key contributing factors for financial sector development in Sub-Saharan Africa. Some studies on Asian countries considered political institutions and political party structures, rule-of-law, political stability, government effectiveness, and regulatory quality (Gani and Ngassam, 2008) as main drivers for financial development.

More specifically, legal theories emphasize two inter-related mechanisms through which legal origin influences finance (Hayek, 1960). Furthermore, political mechanism holds that (a) legal traditions differ in terms of the priority they attach to private property vis-à-vis the rights of the state and the protection of private contracting rights forms the basis of financial development (LLSV, 1999). Adaptability stresses that (a) legal traditions differ in their formalism and ability to evolve with changing conditions and (b) legal traditions that adapt efficiency to minimize the gap between the contracting needs of the economy and the legal system's capabilities will more effectively foster financial development than more rigid systems.

Whereas, legal and regulatory forces can come in many shapes and forms. Financial companies can be regulated by having their functions controlled, for example, long- versus short-term business, types of deposits they might supply, composition of portfolios they might hold, access to individual market segments restricted (for example, mortgage markets), and restrictions on the amount of loans. This meant that the supply of financial services simply could not keep pace with demand for those services (White, 1982).

### **1.2.3. Market Efficiency Theory**

Market efficiency theory suggests that a market is rational and provides correct pricing. That is, the current prices of securities are close to their fundamental values because of either the rational investors or the arbitragers buy and sell action of underpriced or overstocked priced stocks. On the other hand, observed market anomalies have a challenge for this argument.

(Fama, 2000) presented a landmark paper on the efficient market, which focused on comprehensive review of the theory and beyond the theory to empirical work. He defines market efficiency very clearly as a market in which prices always fully reflect all available information. Fama distinguished three nested information sets: past prices, publicly available information and all the information including private information. Efficient market hypothesis is divided into three stages as the weak form, semi-strong form, and the strong form with respect to the availability of the above-mentioned three information sets.

Weak form of efficiency claims that the current stocks prices already reflect all historical market data such as the past prices and trading volumes (Bodie et al, 2007). The assertion of weak form of efficiency is very much consistent with the findings of researches on random walk hypothesis; that is, the price changes from one time to another are independent. Semi strong form of efficiency states that, in addition to the past prices, all publicly available information including fundamental data on the firm's product line, earnings forecast, dividend, stock splits announcements, quality of management, balance sheet composition, and patents held, accounting practices etc. should be fully reflected in security prices. Thus, one cannot make superior profit by using the fundamental analysis in the market, which is efficient in the semi-strong form. Strong form of efficiency states that market prices reflect all information including the past prices and all publicly available information plus all private information. In such a market, prices would always be fair and any investor, even consider traders cannot beat the market.

### **1.2.4. Factor Affecting Efficiency of Stock Exchange**

Different authors have mentioned about the factors necessary for the well-functioning of stock markets. (Fredholm and Taghavi-Amel, 2006) define well-functioning markets as being characterized by high liquidity, where there are many buyers and sellers; diversity, where the investment options for the actors to choose from are not limited; low transaction costs where the transaction process is efficient and the cost of trading is low; and fair, where everyone has the

same information and access to trading.

#### *Government*

It relates to the degree of stability, peace and internal security of a country and how well the government is functioning and is in control. It also relates to the rule of law and how sufficiently Strong and independent is the legal institution to protect property rights and encourage private ownership. (Fredholm and Taghavi-Amel, 2006). According to (Yartey, 2007) good quality institutions such as law and order, democratic accountability, bureaucratic quality as important determinants of stock market development because they reduce political risk and enhance the viability of external finance. (Bekaert, 1995) provides evidence that higher level of political risk Are related to higher degrees of market segmentation and consequently low level of stock market Development. (Erb et al, 1996) show that expected returns are related to the magnitude of political risk. They find that in both developing and developed countries, the lower the level of political risk, the lower is required returns. (Yartey and Adjasi, 2007) According to (Ndikumana, 2001), governments can enhance financial development by promoting a strong, independent and effective legal system, where the judiciary can play an important role in enforcing the constitutional protection of individual and property rights and by arbitrating commercial disputes.

#### *Legal infrastructure*

For an efficient market to operate there has to be a well-founded, clear, transparent and enforceable legal environment. As per the principles of financial market infrastructures issued by the Technical Committee of the International Organization of Securities Commissions (IOSCO) various points were indicated as key considerations in the legal infrastructure of stock exchanges for their efficient operation. These are:

- The legal framework should provide a high degree of certainty for each material aspect of the activities of the market in all relevant jurisdictions.
- It has to have sets of rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.
- There should be an articulated legal basis for its activities to relevant authorities, participants, and, where relevant, participants' customers, in a clear and understandable way.
- There should be clear rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the market

infrastructure under such rules and procedures will not be voided, reversed, or subject to stays.

#### *Regulation*

Regulation of stock exchange market is necessary to promote public confidence, protect investors and the economy from malpractice and wild conditions (Teklehaimanot, 2014). In the international arena, the problems in financial institutions' risk management and supervision systems, which were exposed by financial crisis, have reinforced the need for strong minimum standards for firms' internal systems as well as the need for stronger regulators of the design and implementation of the system. (Teklehaimanot, 2014). Regulation and supervision are typically aimed at the protection of investors from the potentially opportunistic behavior of insiders. Investor protection helps solve agency problems and information asymmetry arising from inside information. (Yartey and Adjasi, 2007).

Four basic regulatory models are indicated by (Carson, 2011). One is government (statutory) model, where the public authority is responsible for securities regulation. The second is limited exchange self-regulatory organization (SRO) model, where the public authority serves as the primary regulator and the exchange performs certain regulatory functions. The third is strong exchange SRO model, where the exchange performs extensive regulatory function, the public authority being the primary regulator. The fourth is an independent member SRO model, where the public authority relies extensively on an independent SRO.

#### *Accounting and Auditing Standards*

Accounting and auditing standards provide users of financial statements with information that is consistent, uniform, relevant and presenting the true and fair view of the financial dealings of the business. According to (Osei, 1998), users of financial statements may have both coinciding and conflicting needs for the various types of financial statements and reports. In meeting these needs, accountants and auditors prepare a single set of general-purpose financial statements and reports that present objective, unambiguous and complete economic facts of the existence and operations of the enterprise. In order to narrow the areas of differences and minimize the dangers of bias, misinterpretation, inexactness and ambiguity, accountants and auditors have adopted generally accepted accounting and auditing principles or standards. These standards allow financial statements and reports to be reasonably compared between enterprises and between accounting periods. Since accounts of listed companies are prepared by reputable firms, accounts submitted



to the stock exchange should be of internationally acceptable accounting and auditing standards.

#### *Macroeconomic Stability*

A stable macroeconomic environment is crucial for the development of the stock market. Macroeconomic volatility worsens the problem of informational asymmetries and becomes a source of vulnerability to the financial system. Low and predictable rates of inflation are more likely to contribute to stock market development and economic growth. Both domestic and foreign investors will be unwilling to invest in the stock market where there are expectations of high inflation. (Yartey and Adjasi, 2007) As per (Garcia and Liu, 1999), sound macroeconomic environments and sufficiently high-income levels GDP per capita, domestic savings, and domestic investments are important determinants of stock market development

#### *Technological infrastructure*

Information and communication technology (ICT) has become a powerful tool for development Extending its role from improving education and health system to widening business opportunities. For actors in the capital market, ICT is vital to communicate and exchange information swiftly; hence, make capital markets more efficient by including all information in Stock prices. (Teklehaimanot, 2014) Automation helps to speed up operations and activities of exchanges and reduces cost associated with manual systems. In addition, automation makes it easier to extend trading days and hours due to less cumbersome procedures. Automated trading also eliminates the need for trade intermediation since investors can log onto systems to monitor markets and also trade on markets, thus bypassing the use of brokers. (Yartey and Adjasi, 2007).

#### *Number of Companies*

The number of companies which could be enlisted in a stock exchange market affects the future and current potential of the capital market. A large number of listed companies not only means more diversity for investors, but is also a source of income through recurring listing fees for issuers for a sustainable stock exchange. (Fredholm and Taghavi-Awal, 2006).

#### *Institutional Investors*

According to (Yartey and Adjasi, 2007), the involvement of institutional investors often is at the Fore front in promoting efficient market practices and financial innovation. They typically favor greater transparency and market integrity in both primary and secondary markets, seek lower transaction cost, and encourage efficient trading and settlement facilities. Pension funds, insurances and other institutional investors can therefore act as a countervailing force to commercial and investment banks as well as other market intermediaries, forcing them to be more

competitive and efficient.

#### *Financial sector Development*

According to (Yartey and Adjasi, 2007), developing the financial intermediary sector can promote stock market development. A support service from the banking system contributes significantly to the development of stock markets.

#### *Public awareness of stock markets*

Awareness about stock exchange markets affects the degree of participation in the markets. If the public is unaware about what stock markets are, the associated benefits and risks and what actions to take whenever some market incidents occur, potential market participants will diminish, hence creating a barrier to entry. Awareness could emanate from formal education, the media or experience gained through participating in the markets.

According to (Guiso and Jappelli, 2003), learning occurs when potential investors interact sequentially with another investor, and as such, if one is aware then the other one becomes aware, which they call such learning as social learning. (Guiso and Jappelli, 2003) further held that social learning amplifies the effectiveness of a given signal which has a better chance of reaching a potential investor.

#### *Public Trust*

Trust plays a central role in the way in which financial services organization present themselves to customers (Ennew, 2008), and this is particularly apparent in stock markets. Research by Sapienza and Zingales (2005) suggests that true insights into the root causes of a nation's financial strengths or weakness lies in trust. They noted that trust increases the probability of direct participation in the stock market. Trust captures investor optimism in that optimistic investors may be induced to participate in the stock market by their inflated expectation of returns. Trust is defined as the subjective belief about the likelihood that a potential trading partner will act honestly. (Lintari, 2006)

#### *Economic Growth*

Garcia and Liu (1999), in their research conducted on 15 countries in Latin America and East Asia Countries, have found out that sustained economic growth, high saving rate, liquidity and developed banking sector determine stock market development in a country, implying that economic development plays an important role in stock exchange development.

#### *Inflation*

A high rate of inflation increases the cost of living and causes a shift in resources from

investments to consumption. This leads to a fall in the demand for market instruments and subsequently leads to a reduction in the volume of stock traded. Also, the monetary policy responds to the increase in the rate of inflation with economic tightening policies, which in turn increases the nominal risk-free rate and hence raises the discount rate in the valuation model. (Tweneboah, 2011).

#### *Foreign Direct Investment (FDI)*

Foreign capital inflows have significant contributions to a country's economic growth and development by lessening and cushioning shocks resulting from low domestic saving and investment. Hence increased FDI has positive effect on the liquidity of stock markets. Besides, Adam et al (2008) establish a triangular relationship on the effect of FDI on stock market development; where FDI stimulates economic growth, economic growth exerts positive impact on stock market development, therefore implying that FDI promotes stock market development. However, Rukhsana(2009) founds the role of FDI in stock market development being twofold, where it may either complement or substitute the development of Stock market in a country

#### *Corporate Governance*

According to Fredholm and Taghavi-Awal (2006), good corporate governance is important to give investors the confidence that the assets they own will be well run and the profits returned to them. If corporate governance is deficient this will affect the willingness to invest negatively. Also, as per Mikdashi (2003), companies with better corporate governance outperform their peers. Thus, corporate governance affects the capital market both through the capital availability (affecting the willingness to invest) and through the investment opportunity availability (by creating more successful companies that survive and grow).

### **1.3. Empirical Review**

According to Murinde (2006) indicates that the development of stock markets in Africa tends to show an evolutionary process with various stages characterized by type of regulatory system, trading method and the scope for market participation. In general, most of the main markets in Africa started with no formally laid- down rules and regulations; trading activities were based on interpersonal relationship. Formal markets were then established, driven either by the desire of traders to diversify sources of investment funds or by the need of governments to establish a formal market to float their debt stocks. Formalization and revitalization process saw changes in the regulatory framework, trading system and composition of market investors.

Murinde (2006) further indicates that the performance, in terms of return and cost of capital, level of listing of companies, liquidity and efficiency of the markets show that almost all of the capital markets in Africa, except the Johannesburg Stock Exchange, and with some respects the Cairo Stock Exchanges, have marked weaknesses. Moreover, most of these markets do not attract international investors despite the fact that stock markets in Africa and other emerging markets seem to have higher returns than developed stock markets. Therefore, these are the major impediments to sustained development of capital markets in Africa. Nonetheless, to enhance their performance, most African countries have revitalized their capital markets in terms of key institutional reforms, namely revitalization of the regulatory framework, modernization of trading systems, and relaxation of restrictions on foreign investors.

A study made on Stock Market Development in Sub Saharan Africa, Charles et al (2007), has indicated that sound macroeconomic environment, well developed banking sector, transparent and accountable institutions, and shareholder protection are some of the challenges stock markets in the Sub Saharan African countries are facing for their efficient functioning. Same study has also suggested factors that help develop stock markets in Africa. These range from the need to increase automation, demutualization of exchanges, regional integration of exchanges, promotion of institutional investors, regulatory and supervisory improvements, involvement of foreigner investors, and educational programs.

W/Senbet (2008) has also identified factors that could hinder stock markets in Africa. One is the issue of macro-economic and political stability with regard to rates of inflation, the levels of domestic saving and investment, quality of institutions such as law and order, democratic accountability, the rate of changes in government policies. The second, as per the study, emanates from the depreciation and wide fluctuations in the values of African currencies. The third relates to the crisis of international confidence which stems from images of war, famine, massive corruption, failed projects, undisciplined governance and gross violation of human rights. This information has the consequences for the stock markets and financial system in general.

A study by Kumo (2008) states most African stocks exchanges are still at early stage of development and face several constraints facing such challenges like political instability in some economies, high volatility in economic growth, macroeconomic uncertainty, liquidity constraints, limited domestic investor base, underdeveloped trading and settlement structures, and limited

market information.

Dailami and Atkin, (2009) did a study to find out the determinants of share price volatility, such as what factors affect stock prices and what specific financial factors makes share prices more volatile. To answer these questions, they choose data of 500 publicly traded firms from survey data base. They applied OLS regression technique to check the relationship between these variables. According to their results dividend yield has a positive strong relationship with share price volatility while on the other hand firm size has negative correlation.

Alemneh (2015) stated to establish an efficiently operating stock exchange market in Ethiopia, the factors that need to get the necessary attention are government commitment, policies and laws; availability of market participants; the legal and regulatory framework that protects the rights and interests of interests of shareholders; macroeconomic conditions such as GDP growth, FDI, inflation rate, devaluation of currency, the level of domestic savings; awareness and trust of the public towards stock markets; financial literacy, the development of accounting and auditing standards and infrastructural development should get due regard.

To conclude, from both theoretical and empirical review of literatures, for an efficiently operating stock exchange market to exist in a country, the factors that need to get the necessary attention are government commitment, policies and laws; availability of market participants; the legal and regulatory framework that protects the rights and interests of shareholders; macro-economic conditions such as GDP growth, FDI, inflation rate, devaluation of currency, the level of domestic savings; awareness and trust of the public towards stock markets; financial literacy, the development of accounting and auditing standards and infrastructural development should get due regard.

#### **1.4. Conceptual Framework**

Conceptual Framework is a basic composition that consists of certain figurative blocks representing the observational, experiential and analytical aspects of a process or system being conceived (Bogdan & Biklen, 2003). The interconnection of these blocks completes the framework for certain expected outcomes. The conceptual framework in this study in order to achieve its specific objectives considered regulatory framework, technology, corporate governance and capital flows as independent variables against stock market growth which is a dependent variable.

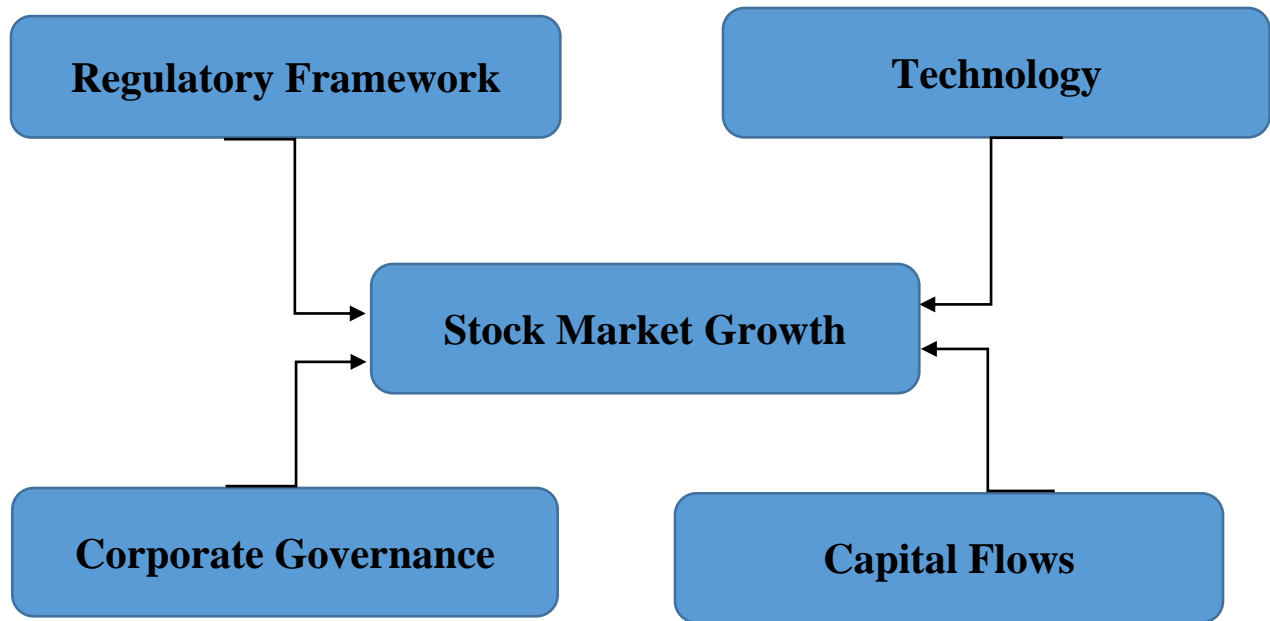


Figure 1.1: The conceptual framework of the study

## **CHAPTER THREE: METHODOLOGY**

### **3.1. Introduction**

The main purpose of the research methodology is to explain how the research is accomplished, what knowledge is required, what information is needed and how information is collected. Research methodology consists of research approach, research design, nature of data, method of data collection, sample size and sampling technique, method of data analysis and presentation, ethical considerations, reliability and validity.

### **3.2. Research Design**

The research design was adopted because it describes the state of affairs, as it exists at present in the study (Kothari, 2010). The availability of time, cost as well as the skill of the researcher was taken into consideration for deciding the research design and how to get sufficient information for the research purpose and hence only individuals who have in depth knowledge of the research topics were contacted. The scientific way of dealing with the sample design and operational design were taken into consideration while dealing the research design and procedure.

A descriptive survey research design was implemented to the study, and a total of 211 respondents were identified with the required knowledge and experience in the area of by considering the independent and dependent variables. Therefore, the research was designed in both descriptive and explanatory features of study. The descriptive study allowed the researcher to describe those data and helps to know the event that was taken place whereas explanatory study to examine the relationships between variables. The study applied this design to evaluate the relationship between design factors and stock market growth in the case of Ethiopia stock exchange. This design is very useful in studying the inter-relations between the variables already mentioned in the conceptual framework.

### **3.3. Research Approach**

The study gathered relevant and appropriate information on the role of monitoring and evaluation for success. The study employed both quantitative and qualitative methods to collect primary and secondary data. Relevant data and information were gathered from share company managers, government officials, employers and shareholders that would draw from the selected private organization at different level, principal persons and respective staffs. The primary and secondary

sources helped to triangulate data from different perspectives regarding the research problem. The secondary sources of information used to provide the conceptual framework and acquire a general picture of the problem.

### **3.4. Nature of Data**

Because the study would follow descriptive research design approach, this study was conducted by collecting data from both primary and secondary sources as being relevant to the study objective(s). Primary data was obtained from self-administered questionnaire. Secondary sources of data were obtained from documents that was relevant to the study objective(s).

In general, there are two types of data that was used for this study:

1. Primary data is the data that was collected mainly from share company managers, government officials, employers and shareholders.
2. Secondary data is the data that was gathered by reviewing important reports of the world bank investment indicators, government investment activities plan, government activities plan, National bank of Ethiopia reports, official websites of international organization, various journals and literature; and finally, rules, regulations, procedures and laws that is linked to the study area.

### **3.5. Method of Data Collection**

In order to collect sufficient data so as to achieve the objective(s) of the study, the researcher was used both primary and secondary data. Primary data was gathered using questionnaire from the respondent's (share company managers, government officials and shareholders that will draw from different selected private organization at different level, principal persons and respective staffs). The questionnaire used for the study was Close-ended and pre-figured composed group questions to which respondents record their answers. The questionnaire was structured to provide respondents with easy fill-in the data. Secondary data were collected through assessing different theoretical and empirical studies of different scholars, academicians, experiences of other African countries on the factors affecting stock market growth on their stock exchange that will be faced and gained in Ethiopia's stock exchange market.

### **Sample Size and Sampling Technique**

The researcher has to draw conclusions on the basis of a sample and, therefore, sample size



determination is an important element in any research, although it is a difficult one. To determine the sample size for the study, the researcher was used the following a simplified formula. Sample size for the study is determined using the formula described below as stated used by (Isreal, 1992) and used by (Olouch, 2012).

$$n = N/1 + N (e)^2$$

Where: n= sample size; N = size of population; and e = precision level

$$n=438/1+438(0.05)^2 = 211$$

The researcher applied proportional stratified simple random sampling techniques for the target population in the selected case area based, in view of the distribution of share company managers, government officials, employers and shareholders in the selected private organization at different level, principal persons and respective staffs in each category, is then determined how many respondents to choose from each category (strata) considerate in the study. Samples were eventually selected randomly from each category in light of the respective sample proportion.

### 3.6. Method of Data Analysis and Presentation

Data that obtain from collecting questioner were analyzed using Statistical Package for Social Sciences (SPSS) program through a descriptive statistic to provide details concerning factors affecting stock market growth: in the case of Ethiopia stock exchange. Data from questionnaires were summarized, edited, coded, tabulated and analyzed. Qualitative and Quantitative analysis was used as data analysis technique. Primarily the data was collected through the questionnaires and analyzed by using descriptive statistics for responses to be obtained by using Likert scale method, open-ended and closed questions and then tabulated, coded and analyzed to present the research findings. Result would be presented using figures, frequency, and mean.

The regression model for the proposed conceptual frame was:

$$Y = \alpha_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where:

Y = Stock Market Growth

$\alpha_0$  = Constant

- $\beta$  = Determines the relationship between the independent variable X and the dependent or Gradient/Slope of the regression measuring the amount of the change in Y associated with a unit change in X.
- X1 = Regulatory Framework
- X2 = Technology
- X3 = Corporate Governance
- X4 = Capital Flows
- $\varepsilon$  = The Error term which accounts for other unobserved factors that may have an effect on Stock Market Growth

### 3.7. Ethical Considerations

Research ethics is deemed a crucial element in conducting a research project within social science research. It is broadly referred to as the appropriateness of researchers' behavior in connection with the rights of those who are the subjects of the research project (Saunders *et al.*, 2009). The ethical issues of voluntary participation, informed consent, risk of harm, confidentiality and anonymity are central and should be considered by researchers when conducting any research project within the social science context (Bryman and Bell, 2015).

The research work followed St. Mary's University ethical guidelines and considered the main ethical issues of the principles of voluntary participation, the requirements of informed consent, ethical standards concerning risk of harm for participants, confidentiality of the information provided by respondents and principles of anonymity that ensure that participants would remain anonymous throughout the study. For example, an informed consent statement was provided at the beginning of the questionnaire, informing participants that their consent would be assumed by their completion of the survey.

Furthermore, to ensure the study's research ethics, an ethical review application would be completed and submitted to the research ethics committees along with a sample of the questionnaire. The study's ethical application would be reviewed by the College of Graduate Studies Ethical Review Committee of the University, and granted full ethical approval prior to the pre-survey fieldwork and the main survey.

### 3.8. Reliability and Validity

#### 3.8.1. Assessing Reliability

Validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure while reliability has to do with the accuracy and precision of a measurement procedure. A measuring instrument is reliable if it provides consistent results. As multiple items in all constructs were used, the internal consistency/reliabilities of independent variable (regulatory framework, technology, corporate governance, and capital flows) and dependent variable (stock market growth) were assessed with Cronbach's Alpha and the reliability values for all constructs are confirmed as greater than 0.7, which are considered ideal (Pallant, 2005). Hence, the findings indicated all constructs considered in the questioner for this study was reliable. The following table shows the summary of reliabilities of all variables under the questioner.

*Table 3.2: Reliability Statistics*

<b>VARIABLES</b>	<b>NUMBER OF ITEMS</b>	<b>CRONBACH'S ALPHA</b>
<b>Influence of regulatory framework on stock market growth</b>	8	0.893
<b>Influence of technology on stock market growth</b>	4	0.874
<b>Corporate governance influences on stock market growth</b>	10	0.928
<b>Corporate governance influences on stock market growth</b>	6	0.868
<b>Capital inflow influences on stock market growth</b>	7	0.900

Source: Questionnaire Survey, 2021

#### 3.8.2. Analysis of Validity

Malhotra (2010) mentioned about three types of validity in his study: content validity, predictive validity, and construct validity. This study addressed content validity through the review of literature and papers referenced throughout this study.

## CHAPTER FOUR: RESULTS AND DISCUSSION

As discussed in previous chapter, this study attempted to analyzed and identify factors affecting stock market growth: in the case of Ethiopia stock exchange. Therefore, the findings of the study are presented and discussed in this chapter. The questionnaire was developed in two different five Likert scales for different areas of investigations which are ranging from five to one independently; where the first Likert scales represented by 1 = Very Low Extent, 2= Low Extent, 3 = Neutral, 4= Great Extent, and 5 = Very Great Extent. In order to investigate factors affecting stock market growth: in the case of Ethiopia stock exchange, correlation and regression analysis were conducted for Likert scale typed questionnaire. A total of 211 questionnaires were distributed to the selected strata and 181 (85.8%) questionnaire was obtained valid and used for analysis. The collected data were presented and analyzed using SPSS (version 20) statistical software. The study used correlation analysis, specifically Pearson correlation to measure the degree of association between different variables under consideration. Regression Analysis was also used to test the effect of independent variable on dependent variable.

### 4.1 Background Information

*Table 4.1: Background Information*

<b>Demographic Profile (N=181)</b>		Frequency	Percent
<b>Sex</b>	Male	112	61.9
	Female	69	38.1
<b>Age</b>	20 – 29 Years	55	30.4
	30 – 39 Years	83	45.9
	40 – 49 Years	29	16.0
	50 and over	14	7.7
<b>Marital Status</b>	Married	70	38.7
	Single	37	20.4
	Widowed	52	28.7
	Divorce	22	12.2
<b>Years of Experience in Industry</b>	Less than 2 years	63	34.8
	2 – 5 years	76	42.0
	6 – 10 years	20	11.0
	11 years and more	22	12.2
<b>Academic Level</b>	Read and Write Only	28	15.5
	Under grade 10	50	27.6
	Grade 10/12 complete	24	13.3

	TEVET graduate	11	6.1
	Diploma	26	14.4
	Degree and above	42	23.2

Source: (SPSS Output, 2021)

The analysis of the respondent's profile in terms of their Sex, Age, Marital Status, Years of Experience in Industry, and Academic Level in line with Table 4.1 is presented as follows:

**Sex:**

The researcher sought to determine the gender of the respondents. From the findings, 112 respondents (61.9%) were male, and 69 respondents (38.1%) were female implying that the gender distribution of respondents is not evenly distributed. According to the response, the respondents provide relevant and reliable information needed for the study and they are fit in line with the response of the questionnaire.

**Age:**

From the findings, the respondents were 20 – 29 Years (30.4%), 30 – 39 Years (45.9%), 40 – 49 Years (16.0%), and 50 and over (7.7%). This shows that majority of the respondents were almost in the range of 20 – 29 Years and 30 – 39 Years for the study, therefore they were well versed with relevant information on factors affecting stock market growth: in the case of Ethiopia stock exchange which was needed for the study. Hence, their information can be considered as reliable and relevant for the study.

**Marital Status:**

From the total respondents, 70 respondents (38.7%) were married, 37 respondents (20.4%) were single, 52 respondents (28.7%) were widowed and 22 respondents (12.2%) were divorce. According to the response, the respondents provide relevant and reliable information needed for the study and they are fit in line with the response of the questionnaire.

**Years of Experience in Industry:**

From the total respondents, 63 respondents (34.8%) were less than 2 years of stay in the industry, 76 respondents (42.0%) were 2 – 5 years of stay in the industry, 20 respondents (11.0%) were 6 – 10 years of stay in the industry, and 22 respondents (12.2%) were 11 years and more of stay in the industry. The findings imply the fact that most of the respondents have sufficient knowledge and experience about their firm and the subject matter of the study.

### Academic Level:

From the total respondents, 28 respondents (15.5%) were read and write only, 50 respondents (27.6%) were under grade 10, 24 respondents (13.3%) were Grade 10/12 complete, 11 respondents (6.1%) were TEVET graduate, 26 respondents (14.4%) were Diploma holders and 42 respondents (23.2%) were Degree holders and above. This implies the fact that all the respondents are directly involved in the stock market exchange and hence, according to the response, the respondents provide relevant and reliable information needed that can be considered as reliable and relevant for the study.

## 4.2. Stock Market Attributes

### 4.3 Regulatory Framework

The study in this section sought information about influence of regulatory framework on stock market growth. With regard to identifying factors affecting stock market growth: in the case of Ethiopia stock exchange, the study requested respondents to rate the extent to which influence of regulatory framework on stock market growth affects stock market growth: in the case of Ethiopia stock exchange. Table 4.2 presents the findings.

Table 4.2: Regulatory Framework

Item	Mean	Std. Deviation
Government's strategies and policies are clear enough with respect to stock market exchange	3.60	1.448
There are legal and regulatory frameworks to regulate the stock exchange of securities	3.57	1.546
The commitment of government in pursuing the establishment of stock exchange markets is visible	3.41	1.516
The legal infrastructure and regulation framework is comprehensive	3.60	1.448
The regulatory framework pertaining to share companies are up to date	3.86	1.457
Inadequate and lack of regulatory frameworks to take care of the regulation and supervision activities	3.80	1.474
To what extent do capital requirements hinder firms from listing in the stock exchange	4.08	1.312
Regulatory framework increases customer's confidence	3.97	1.498
<b>Mean of Mean</b>	<b>3.74</b>	

Source: (SPSS Output, 2021)

The research questionnaire designed using 5-point Likert scale to collect appropriate responses, in relation to this the respondents indicated the extent they agree with the statements by choosing: 1 = Very Low Extent, 2= Low Extent, 3 = Neutral (Moderate Extent), 4= Great Extent, and 5 = Very Great Extent. Based on the response of the respondents Mean computed on the above table 4.2. A mean (M) score of 0 to 1.5 means that influence of regulatory framework on stock market growth affects stock market exchange at very low extent, between 1.50 to 2.50 means that influence of regulatory framework on stock market growth affects stock market exchange at low extent, between 2.50 to 3.50 means that influence of regulatory framework on stock market growth affects stock market exchange at moderate extent, between 3.50-4.50 means that influence of regulatory framework on stock market growth affects stock market exchange at great extent and a mean above 4.50 means that influence of regulatory framework on stock market growth affects stock market exchange in a very great extent.

Based on the findings on Table 4.2, all of the items for the influence of regulatory framework on stock market growth affects stock market exchange scores as shown in the total mean of mean (3.74) which is in between 3.50 - 4.50 that imply the respondents agreed to the fact that the influence of regulatory framework on stock market growth affects stock market exchange at the level of great extent in the case of Ethiopia stock exchange.

As per the table 4.2, the results show that the industry under the study have taken into consideration influence of regulatory framework as the factor for stock market growth which affects stock market exchange. Thus, these finding can be useful for the sector to enhance the stock market growth in the area of stock market exchange.

In general, based on the above results it was found that inside the sector influence of regulatory framework is a challenge and factor for stock market growth which affects stock market exchange. This is evidenced that regulatory framework plays a significant role in stock market growth with the results revealing that majority of respondents agreed to a great extent on the influence of regulatory framework on stock market growth with an average mean of mean score of 3.74. Thus, the study concludes that sector should have to focus on regulatory framework to creating a good stock market exchange in order to enhance the stock market growth.

## **4.2 Influence of Technology**

The study in this section sought information about influence of technology on stock market growth. With regard to identifying factors affecting stock market growth: in the case of Ethiopia stock exchange, the study requested respondents to rate the extent to which influence of technology on stock market growth affects stock market growth: in the case of Ethiopia stock exchange. Table 4.3 presents the findings.

The research questionnaire designed using 5-point Likert scale to collect appropriate responses, in relation to this the respondents indicated the extent they agree with the statements by choosing: 1 = Very Low Extent, 2= Low Extent, 3 = Neutral (Moderate Extent), 4= Great Extent, and 5 = Very Great Extent. Based on the response of the respondents Mean computed on the above table 4.3. A mean (M) score of 0 to 1.5 means that influence of technology on stock market growth affects stock market exchange at very low extent, between 1.50 to 2.50 means that influence of technology on stock market growth affects stock market exchange at low extent, between 2.50 to 3.50 means that influence of technology on stock market growth affects stock market exchange at moderate extent, between 3.50-4.50 means that influence of technology on stock market growth affects stock market exchange at great extent and a mean above 4.50 means that influence of technology on stock market growth affects stock market exchange in a very great extent.

*Table 4.3: Influence of Technology on Stock Market Growth*

<b>Item</b>	<b>Mean</b>	<b>Std. Deviation</b>
Technological infrastructure of the country is in its development stage	4.04	1.364
Using of state of art technology and communication network across the country	3.91	1.381
Electronic trading has impacted positively on stock market Growth	3.82	1.507
The No. of securities traded have increased in stock exchange after automation	3.72	1.480
<b>Mean of Mean</b>	<b>3.87</b>	

Source: (SPSS Output, 2021)

Based on the findings on Table 4.3, all of the items for the influence of technology on stock market growth affects stock market exchange scores as shown in the total mean of mean (3.87) which is in between 3.50 - 4.50 that imply the respondents agreed to the fact that the influence of technology on stock market growth affects stock market exchange at the level of great extent in the case of Ethiopia stock exchange.



As per the table 4.3, the results show that the industry under the study have taken into consideration influence of technology as the factor for stock market growth which affects stock market exchange. Thus, these finding can be useful for the sector to enhance the stock market growth in the area of stock market exchange.

In summary, based on the above results it was found that inside the sector influence of technology is a challenge and factor for stock market growth which affects stock market exchange. This is evidenced that technology plays a significant role in stock market growth with the results revealing that majority of respondents agreed to a great extent on the influence of technology on stock market growth with an average mean of mean score of 3.87. Thus, the study concludes that sector should have to focus on technology to creating a good stock market exchange in order to enhance the stock market growth.

### 4.3 Corporate Governance Influences on Stock Market Growth

The study in this section sought information about influence of corporate governance on stock market growth. With regard to identifying factors affecting stock market growth: in the case of Ethiopia stock exchange, the study requested respondents to rate the extent to which influence of corporate governance on stock market growth affects stock market growth: in the case of Ethiopia stock exchange. Table 4.4 presents the findings.

*Table 4.4: Corporate Governance Influences on Stock Market Growth*

<b>Item</b>	<b>Mean</b>	<b>Std. Deviation</b>
Low level of corporate governance	4.01	1.183
The governing laws on corporate governance are not up-to-date	3.81	1.291
Management provides adequate information when making accountability	3.79	1.354
There is stakeholder participation during accountability	3.75	1.329
The degree of participation during the accountability process leads to compliance	3.81	1.291
The accountability process is used as a means of assessing resource allocation	3.75	1.363
Staff are aware of the policies, laws and regulations	3.80	1.328
Board members possess the required knowledge and skills required to perform their roles	3.81	1.320
Board members have the capacity to develop policies and procedures	4.06	1.177
Well-developed regulated stock exchange market	4.08	1.190

<b>Mean of Mean</b>	<b>3.87</b>	
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Source: (SPSS Output, 2021)

The research questionnaire designed using 5-point Likert scale to collect appropriate responses, in relation to this the respondents indicated the extent they agree with the statements by choosing: 1 = Very Low Extent, 2= Low Extent, 3 = Neutral (Moderate Extent), 4= Great Extent, and 5 = Very Great Extent. Based on the response of the respondents Mean computed on the above table 4.4. A mean (M) score of 0 to 1.5 means that influence of corporate governance on stock market growth affects stock market exchange at very low extent, between 1.50 to 2.50 means that influence of corporate governance on stock market growth affects stock market exchange at low extent, between 2.50 to 3.50 means that influence of corporate governance on stock market growth affects stock market exchange at moderate extent, between 3.50-4.50 means that influence of corporate governance on stock market growth affects stock market exchange at great extent and a mean above 4.50 means that influence of corporate governance on stock market growth affects stock market exchange in a very great extent.

Based on the findings on Table 4.4, all of the items for the influence of corporate governance on stock market growth affects stock market exchange scores as shown in the total mean of mean (3.87) which is in between 3.50 - 4.50 that imply the respondents agreed to the fact that the influence of corporate governance on stock market growth affects stock market exchange at the level of great extent in the case of Ethiopia stock exchange.

As per the table 4.4, the results show that the industry under the study have taken into consideration influence of corporate governance as the factor for stock market growth which affects stock market exchange. Thus, these finding can be useful for the sector to enhance the stock market growth in the area of stock market exchange.

In general, based on the above comparative results it was found that inside the sector influence of corporate governance is a challenge and factor for stock market growth which affects stock market exchange. This is evidenced that corporate governance plays a significant role in stock market growth with the results revealing that majority of respondents agreed to a great extent on the influence of corporate governance on stock market growth with an average mean of mean score of 3.87. Thus, the study concludes that sector should have to focus on corporate governance to creating a good stock market exchange in order to enhance the stock market growth.

#### 4.4 Capital Inflow Influences on Stock Market Growth

The study in this section sought information about influence of capital inflow on stock market growth. With regard to identifying factors affecting stock market growth: in the case of Ethiopia stock exchange, the study requested respondents to rate the extent to which influence of capital inflow on stock market growth affects stock market growth: in the case of Ethiopia stock exchange. Table 4.5 presents the findings.

The research questionnaire designed using 5-point Likert scale to collect appropriate responses, in relation to this the respondents indicated the extent they agree with the statements by choosing: 1 = Very Low Extent, 2= Low Extent, 3 = Neutral (Moderate Extent), 4= Great Extent, and 5 = Very Great Extent. Based on the response of the respondents mean computed on the above table 4.5. A mean (M) score of 0 to 1.5 means that influence of capital inflow on stock market growth affects stock market exchange at very low extent, between 1.50 to 2.50 means that influence of capital inflow on stock market growth affects stock market exchange at low extent, between 2.50 to 3.50 means that influence of capital inflow on stock market growth affects stock market exchange at moderate extent, between 3.50-4.50 means that influence of capital inflow on stock market growth affects stock market exchange at great extent and a mean above 4.50 means that influence of capital inflow on stock market growth affects stock market exchange in a very great extent.

*Table 4.5: Capital Inflow Influences on Stock Market Growth*

<b>Item</b>	<b>Mean</b>	<b>Std. Deviation</b>
Market Size to Utilize Resources Efficiently and Exploit Economies of Scale	3.46	1.558
High Risk of Exchange Rate Fluctuations Due to The Significant Amount of Stock	3.65	1.526
Successful Economic Policies and A Consequently Stable Macroeconomic Environment	3.56	1.561
Trade Openness to the Stock Market Exchange	3.60	1.501
The Growth of Pension Institutions Funds Drive to Stock Market Development	3.65	1.493
Promotes Efficient Financial System	4.08	1.370
<b>Mean of Mean</b>	<b>3.67</b>	

Source: (SPSS Output, 2021)

According to the findings on Table 4.5, all of the items for the influence of capital inflow on stock market growth affects stock market exchange scores as shown in the total mean of mean (3.67)

which is in between 3.50 - 4.50 that imply the respondents agreed to the fact that the influence of capital inflow on stock market growth affects stock market exchange at the level of great extent in the case of Ethiopia stock exchange.

As per the table 4.5, the results show that the industry under the study have taken into consideration influence of capital inflow as the factor for stock market growth which affects stock market exchange. Thus, these finding can be useful for the sector to enhance the stock market growth in the area of stock market exchange.

In summary, based on the above results it was found that inside the sector influence of capital inflow is a challenge and factor for stock market growth which affects stock market exchange. This is evidenced that capital inflow plays a significant role in stock market growth with the results revealing that majority of respondents agreed to a great extent on the influence of capital inflow on stock market growth with an average mean of mean score of 3.67. Thus, the study concludes that sector should have to focus on capital inflow to creating a good stock market exchange in order to enhance the stock market growth.

#### 4.5 Effects of Stock Market Growth on Stock Exchange

The study in this section sought information about collective effects of stock market growth on stock exchange in general. With regard to identifying factors affecting stock market growth: in the case of Ethiopia stock exchange, the study requested respondents to rate the extent to which effects of stock market growth on stock exchange in general, in the case of Ethiopia stock exchange. Table 4.6 presents the findings.

*Table 4.6: Effects of Stock Market Growth on Stock Exchange*

<b>Item</b>	<b>Mean</b>	<b>Std. Deviation</b>
Low awareness level of the society about stock exchange markets	3.86	1.457
Lack of public trust about stock exchange markets	3.80	1.474
Willingness and initiation from the government in the establishment of stock exchange market in Ethiopia	4.08	1.312
Inadequate/absence/ of regulation of stock market and related activities in the country	3.56	1.561
Lack /inadequate/ level of qualified and skilled human resource to exert stock market	3.60	1.501
Inadequate communication network across the country	3.65	1.493

Inadequate/absence/ of regulation of stock market and related activities	4.08	1.370
<b>Mean of Mean</b>	<b>3.80</b>	

Source: (SPSS Output, 2021)

Here is also, the research questionnaire designed using 5-point Likert scale to collect appropriate responses, in relation to this the respondents indicated the extent they agree with the statements by choosing: 1 = Very Low Extent, 2= Low Extent, 3 = Neutral (Moderate Extent), 4= Great Extent, and 5 = Very Great Extent. Based on the response of the respondents Mean computed on table 4.6. A mean (M) score of 0 to 1.5 means that effects of stock market growth on stock exchange at very low extent on the selected industry, between 1.50 to 2.50 means that effects of stock market growth on stock exchange at low extent, between 2.50 to 3.50 means the effects of stock market growth on stock exchange at moderate extent, between 3.50-4.50 means that effects of stock market growth on stock exchange at great extent and a mean above 4.50 means the effects of stock market growth on stock exchange in a very great extent.

According to the responses of the respondents based on the findings on Table 4.6, all of the items for the effects of stock market growth on stock exchange scores as shown in the total mean of mean (3.80) which is in between 3.50 - 4.50 that imply the respondents agreed to the fact that the effects of stock market growth on stock exchange is at the level of great extent.

In summary, based on the above comparative results it was found that stock market growth on stock exchange is a challenge. This is evidenced that the sector under the case study has challenges in effects of stock market growth on stock exchange. Thus, the study concludes that sector should have to focus on the possible solutions to the whole parameter of stock exchange in the area of the sector in order to improve the general effects of stock market growth on stock exchange.

#### 4.5.1 Correlation Analysis

Correlations are the measure of the linear relationship between two variables. A correlation coefficient has a value ranging from -1 to 1. Values that are closer to the absolute value of 1 indicate that there is a strong relationship between the variables being correlated whereas values closer to 0 indicates that there is little or no linear relationship. As described by (Pallant, 2005), the correlation is a commonly used measure of the size of an effect: values of  $\pm 0.1$  represent a small effect,  $\pm 0.3$  is a medium effect and  $\pm 0.5$  is a large effect.

In this section, correlation analysis conducted in the light of each research objectives and conceptual frame works developed. The relationship between independent variable (regulatory framework, technology, corporate governance, and capital flows) and dependent variable (stock market growth) was investigated using correlation analysis. This provided correlation Coefficients which indicated the strength and direction of relationship. The p-value also indicated the probability of this relationship’s significance.

#### 4.5.1.1 Correlation Matrix between dependent variable, independent variables and moderating variable

Table 4.8: Correlation Matrix between dependent variable, and independent variables

		<b>Correlations</b>				
		Effects of stock market growth on stock exchange	Influence of regulatory framework on stock market growth	Influence of technology on stock market growth	Corporate governance influences on stock market growth	Capital inflow influences on stock market growth
Effects of stock market growth on stock exchange	Pearson Correlation	1	.786**	.694**	.784**	.896**
	Sig. (2-tailed)		.000	.000	.000	.000
Influence of regulatory framework on stock market growth	Pearson Correlation	.786**	1	.859**	.818**	.680**
	Sig. (2-tailed)	.000		.000	.000	.000
Influence of technology on stock market growth	Pearson Correlation	.694**	.859**	1	.874**	.689**
	Sig. (2-tailed)	.000	.000		.000	.000
Corporate governance influences on stock market growth	Pearson Correlation	.784**	.818**	.874**	1	.760**
	Sig. (2-tailed)	.000	.000	.000		.000
Capital inflow influences on stock market growth	Pearson Correlation	.896**	.680**	.689**	.760**	1
	Sig. (2-tailed)	.000	.000	.000	.000	

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Source: (SPSS Output, 2021)

The correlation Matrix between independent variable (regulatory framework, technology, corporate governance, and capital flows) and dependent variable (stock market growth) was computed in the above table 4.8. The result of correlation matrix dependent variable (stock market growth) against independent variable (regulatory framework, technology, corporate governance, and capital flows) as follow.

As indicated on table 4.8, the Pearson correlation test was conducted between dependent variable against independent variables. And on the given study the results show that there is significant positive correlation at the level of 0.01 between a dependent variable (Effects of stock market growth on stock exchange) against independent variable (Influence of regulatory framework on stock market growth, Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, corporate governance influences on stock market growth, and Capital inflow influences on stock market growth). In other words, Influence of regulatory framework on stock market growth, Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, Corporate governance influences on stock market growth, and Capital inflow influences on stock market growth has positive relationship with correlation coefficient of 0.786\*\* (r=0.786), 0.694\*\* (r=0.694), 0.784\*\* (r=0.784), and 0.896\*\* (r=0.896), respectively, and strongly significant significance at the value of 0.01 level with dependent variable (Effects of stock market growth on stock exchange).

Furthermore, the research findings of the above empirical investigation on table 4.8 are generally consistent with majority of prior studies and stand with more recent studies reporting similar results. This consolidates the research findings and dimensions reaching relatively conclusive results on the topic of factors affecting stock market growth: in the case of Ethiopia stock exchange. In addition, the new research discoveries and research directions attained with in the set of empirical observation bridge the mixed theoretical views of factors affecting stock market growth in stock exchange within the existing knowledge, giving rise to some good insights.

In general, the overall empirical findings of this research investigation from the statistical results of correlation matrix indicates that the correlation between independent variable (regulatory

framework, technology, corporate governance, and capital flows) and dependent variable (stock market growth) have a positive impact and most largely and significantly associated.

#### 4.5.2 Regression Analysis

This regression analysis is conducted to know by how much the independent variable (Influence of regulatory framework on stock market growth, Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, corporate governance influences on stock market growth, and Capital inflow influences on stock market growth) explains the and dependent variable (Effects of stock market growth on stock exchange). The regression analysis was conducted based on the conceptual framework that is between dependent variable (Effects of stock market growth on stock exchange) against independent variable (Influence of regulatory framework on stock market growth, Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, corporate governance influences on stock market growth, and Capital inflow influences on stock market growth). The results of the regression analysis are presented as follows.

##### 4.8.2.1 Autocorrelation Test

Table 4.9 shows that the multiple linear regression model summary and overall fit statistics. From the table it finds that the adjusted R<sup>2</sup> of the proposed model is 0.968 with R<sup>2</sup> = 0.969, this means that the linear regression explains 96.9 % of the variance in the data. The Durbin-Watson d = 1.817, which is between the two critical values of 1.5 < d < 2.5 (Bryman, A. and Bell, E., 2015). Therefore, in the multiple linear regression data that is used for this model there is no first order linear auto correlation.

Table 4.9: Autocorrelation Test

Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.937 <sup>a</sup>	.878	.875	.40666	.878	315.622	4	176	.000	1.846



a. Predictors: (Constant), Capital inflow influences on stock market growth, Influence of regulatory framework on stock market growth, corporate governance influences on stock market growth, Influence of technology on stock market growth

b. Dependent Variable: Effects of stock market growth on stock exchange

Source: (SPSS Output, 2021)

#### 4.8.2.2 Multicollinearity Test

Table 4.10: Multicollinearity test of independent variable (Coefficients <sup>a</sup>)

Model		Unstandardized Coefficients		Standard ized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.024	.124		-.191	.849		
	Influence of regulatory framework on stock market growth	.471	.056	.454	8.396	.000	.238	4.200
	Influence of technology on stock market growth	-.291	.060	-.309	-4.872	.000	.173	5.783
	Corporate governance influences on stock market growth	.202	.071	.176	2.840	.005	.182	5.508
	Capital inflow influences on stock market growth	.658	.041	.667	16.231	.000	.412	2.429

a. Dependent Variable: Effects of stock market growth on stock exchange

Source: (SPSS Output, 2021)

The result in table 4.10 show that the collinearity between independent variables has no series problem, hence the value of tolerance for all independent variable is greater than 0.1 and all VIF is

less than ten ( $VIF < 10$ ), according to (Pallant, 2005). Thus, from the above table 4.10 it can be concluding that there is no co linearity within the data of the study.

#### 4.8.2.3 Regression analysis between dependent variable, and independent variables

Table 4.11: Regression model between dependent variable, and independent variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.937a	.878	.875	.40666
a. Predictors: (Constant), Capital inflow influences on stock market growth, Influence of regulatory framework on stock market growth, corporate governance influences on stock market growth, Influence of technology on stock market growth				
b. Dependent Variable: Effects of stock market growth on stock exchange				

Source: (SPSS Output, 2021)

Table 4.11 above indicates R, R Square, Adjusted R Square and standard error of the estimate. Further, it lists the independent variables that are entered in to the regression model. R (.937) is the correlation of independent variables with the dependent variable. The model summary, above shows the R Square value is 0.878. This tells us how much of the variance in the dependent variable (Effects of stock market growth on stock exchange) are explained by the independent variables (Influence of regulatory framework on stock market growth, Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, corporate governance influences on stock market growth, and Capital inflow influences on stock market growth). This means that the model (independent variables) explains 87.8% of the variance in dependent variable (Effects of stock market growth on stock exchange) under the case study, the remaining 12.2% of the changes in the fact can be attributed from other factors. To assess the statistical significance of the result it is necessary to look in to table 4.12 ANOVA.

Table 4.12: ANOVA result between dependent variable, and independent variables

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	208.777	4	52.194	315.622	.000 <sup>b</sup>
	Residual	29.105	176	.165		
	Total	237.882	180			
a. Dependent Variable: Effects of stock market growth on stock exchange						
b. Predictors: (Constant), Capital inflow influences on stock market growth, Influence of regulatory framework on stock market growth, corporate governance influences on stock market growth, Influence of technology on stock market growth						

Source: (SPSS Output, 2021)

The F Value in the ANOVA test determine the p value; the P value is the probability of getting a result at least as extreme as the one that was actually observed, given that the null hypothesis is true. The null hypothesis is rejected when the p value is smaller than the alpha level from the ANOVA test. Which means the null value is rejected if the critical F value is smaller than F value in the ANOVA tests, unless you also have a small P value. Hence, for this research the test P value of 0.00 from table 4.12 was computed which indicate the test P value is smaller than an alpha level of 0.05 and 0.01, which means the null hypothesis couldn't be rejected by comparing the F value in the ANOVA test.

In sum, the ANOVA Table 4-12 above shows that p - value (sig.) is significant at 0.01 level of significance. This indicates a statistically there is significant contribution, as indicated by the Sig. value equal to .000. Therefore, the ANOVA table indicates that the model as a whole is significant at  $p < 0.01$ ). The  $R^2$  result indicates that 87.8% of the variance in dependent variable (Effects of stock market growth on stock exchange) has been significantly explained by independent variables (Influence of regulatory framework on stock market growth, Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, corporate governance influences on stock market growth, and Capital inflow influences on stock market growth). Accordingly, since the F-ratio in the ANOVA table tests whether the overall regression model is a good fit for the data. The F value shows 315.622 which is greater than the F critical it shows the model is significant. Which implies the coefficients included in the model improved the model fit.

Table 4.13: Regression coefficient between dependent variable, and independent variables

Model	Unstandardized Coefficients		Standard ized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	-.024	.124		-.191	.849		
	Influence of regulatory framework on stock market growth	.471	.056	.454	8.396	.000	.238	4.200

Influence of technology on stock market growth	-.291	.060	-.309	-4.872	.000	.173	5.783
Corporate governance influences on stock market growth	.202	.071	.176	2.840	.005	.182	5.508
Capital inflow influences on stock market growth	.658	.041	.667	16.231	.000	.412	2.429
a. Dependent Variable: Effects of stock market growth on stock exchange							
b. Predictors: (Constant), Capital inflow influences on stock market growth, Influence of regulatory framework on stock market growth, corporate governance influences on stock market growth, Influence of technology on stock market growth							

Source: (SPSS Output, 2021)

In general, Table 4.13 shows the ANOVA results of the multiple regression analysis. The significance value of 0.00 indicates that the regression relationship is strongly significant in predicting dependent variable (Effects of stock market growth on stock exchange) against its factors explained as independent variables (Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, Corporate governance influences on stock market growth, and Capital inflow influences on stock market growth) which shows the model is significant and fit to the regression model.

The regression model equation was:

$$Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y = Stock Market Growth

$\alpha_0$  = Constant

$\beta$  = Determines the relationship between the independent variable X and the dependent or Gradient/Slope of the regression measuring the amount of the change in Y associated with a unit change in X.

X1 = Regulatory Framework

- X2 = Technology
- X3 = Corporate Governance
- X4 = Capital Flows
- $\varepsilon$  = The Error term which accounts for other unobserved factors that may have an effect on Stock Market Growth

As per the result above the resulting equation become:

$$Y = -0.024 + 0.454X1 + (-0.309X2) + 0.176X3 + 0.667X4 + \varepsilon(0.05)$$

The result of this study exhibited that all the independent variables (Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, corporate governance influences on stock market growth, and Capital inflow influences on stock market growth) have positive and significant effect on dependent variable (Effects of stock market growth on stock exchange) in the studied selected sector. As the result indicate standardized coefficient of Beta=.454 (at a tolerance level of 0.238 and sig. at the 0.01 level) for Influence of regulatory framework on stock market growth, and standardized coefficient of Beta=-0.309 (at a tolerance level of 0.173 and sig. at the 0.01 level) for Influence of technology on stock market growth, standardized coefficient of Beta=0.176 (at a tolerance level of 0.182 and sig. at the 0.01 level) Corporate governance influences on stock market growth, and standardized coefficient of Beta=0.667 (at a tolerance level of 0.412 and sig. at the 0.01 level) for Capital inflow influences on stock market growth, which all results implied that from the regression analysis that all the independent variables (employment opportunities, market stability, income of the private manufacturing investors, income of the workers of private firms) have positive and significant effect on dependent variable (effects of stock market growth on stock exchange) in the studied sector.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **5.1 Introduction**

This chapter presents a summary of the study findings, conclusions and recommendations. The

findings are summarized in line with the objectives of the study which include: determining how regulatory framework influence stock market growth in the case of Ethiopia stock exchange; studying on how to find out the technology influence stock market growth in the case of Ethiopia stock exchange; investigating how corporate governance influence stock market growth in the case of Ethiopia stock exchange; and assessing the influence of capital inflows on stock market growth in the case of Ethiopia stock exchange; inside the selected sector. Thus, the results showed that independent variables (Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, corporate governance influences on stock market growth, and Capital inflow influences on stock market growth) have positive and significant effect on dependent variable and well explained the dependent variable (Effects of stock market growth on stock exchange), and achieved the research objective.

## 5.2 Summary

According to the data analysis in the previous section, summary of the findings presented as follows.

The study determined the influence of eight (8) collective building blocks of influence of regulatory framework on stock market growth, and all of the items for the influence of regulatory framework on stock market growth scores a total mean of mean of 3.74, which implied that the respondents agreed to the fact that influence of regulatory framework on stock market growth is at the level of great extent, and found that regulatory framework greatly influence stock market growth in stock exchange.

The study further evaluating the extent to which the four (4) collective building blocks of influence of technology on stock market growth, and all of the items for the influence of technology on stock market growth scores a total mean of mean of 3.87, which implied that the respondents agreed to the fact that influence of technology on stock market growth is at the level of great extent, and found that technology greatly influence stock market growth.

The study also assessed the influence of ten (10) collective building blocks of corporate governance influences on stock market growth, and all of the items for corporate governance influences on stock market growth scores a total mean of mean of 3.87, which implied that the respondents agreed to the fact that corporate governance influences on stock market growth is

at the level of great extent, and found that Corporate governance influences on stock market growth is greatly affects stock market exchange.

The study in addition explored to what extent that six (6) collective building blocks of capital inflow influences on stock market growth, and all of the items for capital inflow influences on stock market growth scores a total mean of mean of 3.67, which implied that the respondents agreed to the fact that capital inflow influences on stock market growth is at the level of great extent, and found that capital inflow influences on stock market growth greatly affects stock market exchange.

The study also evaluates the extent that seven (7) collective building blocks of effects of stock market growth on stock exchange, and all of the items for the effects of stock market growth on stock exchange scores a total mean of mean of 3.80, which implied that the respondents agreed to the fact that effects of stock market growth on stock exchange is at the level of great extent, and found that stock market growth of the sector greatly influence stock exchange.

Finally, the statistical results of study from the correlation and regression analysis confirm and explore that there is a strongly significant positive correlation at the level of 0.01 between independent variables (Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, Corporate governance influences on stock market growth, and Capital inflow influences on stock market growth) with the dependent variable (Effects of stock market growth on stock exchange). The regression was conducted based on the conceptual framework that is between dependent variable (Effects of stock market growth on stock exchange) and implied that all independent variables for the study have a positive impact and most largely and significantly associated with dependent variable. Regression analysis in addition revealed that that nearly 87.8% of the variance in the data for the study which showed that of dependent variable (Effects of stock market growth on stock exchange) is explained by independent variables (Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, corporate governance influences on stock market growth, and Capital inflow influences on stock market growth).

## 5.3 Conclusion

Based on the responses majority of respondents agreed, based on the results of the study and the summary of findings the following conclusions are given:

The study determined the independent variables (Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, corporate governance influences on stock market growth, and Capital inflow influences on stock market growth) is at the level of great extent, and were positively and significantly influences the stock market exchange.

In addition to the above conclusions, the descriptive statistical analysis shows that there is a strongly significant positive correlation between independent variables (Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, Corporate governance influences on stock market growth, and Capital inflow influences on stock market growth) with the dependent variable (Effects of stock market growth on stock exchange), and regression analysis in addition revealed that that nearly 87.8% of the variance in the data for the study which showed that of dependent variable (Effects of stock market growth on stock exchange is explained by independent variables (Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, Corporate governance influences on stock market growth, and Capital inflow influences on stock market growth).

#### **5.4 Recommendation**

Based on the analysis on factors affecting stock market growth: in the case of Ethiopia stock exchange, feedback raised from the interaction of the independent variable against the dependent variables could be suggested. The following are some recommendations are proposed as a means of alleviating the problems found, and implications of the study related to the empirical findings based on the study results and conclusions drawn above.

- ∅ The study recommends that the sector should focused on regulatory framework, technology, corporate governance, and capital inflow to proven the effects on stock market growth on the Ethiopia stock exchange.
- ∅ The study also pushes for the stock market sector need to be compelled to follow strictly to the required standards of stock exchange. This will ensure that the regulatory framework,



technology, corporate governance, and capital inflow is put into consideration by encouraging the sector.

- ∅ The government should supervise the sector activities on the ground to identify the real problems and to encourage them to perform well, and should also observe and control the decisions made on stock exchange.
- ∅ Finally, from the sector side there is a need to give emphasis on Influence of regulatory framework on stock market growth, Influence of technology on stock market growth, corporate governance influences on stock market growth, and Capital inflow influences on stock market growth to have a great impact on the country stock exchange.

In summary, the study recommends that proper regulatory framework and good corporate governance should be instituted in order to steer stock market growth. Proper regulation will ensure that all market players adhere to a set rules and procedures and any disputes are addressed within the laid down procedures. On technology the study recommends that adoption technology is significant in sphere heading the sector into growth to match other stock markets in developed economies. This will go a long way in attracting more investors as well as introduction of new products and services. Finally, the study recommends that the stock market sector in collaboration with the government should stimulate stock market growth.

### **5.5 Suggestion for Further Study**

The present study used different related departments which are related to the sector to conduct the research on factors affecting stock market growth: in the case of Ethiopia stock exchange that all basically centered inside Addis Ababa, Ethiopia. Hence, future studies should consider and expanding their scope to include the case of other areas into consideration in Ethiopia, and to be done in other town inside the country. Furthermore, the evaluation on factors affecting stock market growth: in the case of Ethiopia stock exchange is limited to the stated determinates (factors) and areas like inside Addis Ababa, Ethiopia, therefore further studies should be conducted on the factors affecting stock market growth: in the case of Ethiopia stock exchange of different areas and in different parts of the country by taking into consideration other determinates (factors) which are not considered by this study.

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# APPENDICES

## Appendix One: Questionnaire

**ST. MARY'S UNIVERSITY**

**SCHOOL OF GRADUATE STUDIES**

**DEPARTMENT OF BUSINESS ADMINISTRATION**

Dear Sir/Madam,

The purpose of this questionnaire is to gather data on “**FACTORS AFFECTING STOCK MARKET GROWTH: IN THE CASE OF ETHIOPIA STOCK EXCHANGE**” in order to fulfill the University’s requirement set for awarding a **MASTERS OF ART DEGREE IN BUSINESS ADMINISTRATION (MBA)** at **ST. MARY’S UNIVERSITY**. The study is purely for academic purpose and thus not affects you in any case. So, your genuine, frank and timely response is vital for successfulness of the study. Therefore, I kindly request you to respond to each item of the question very carefully.

### *General Instructions*

- There is no need of writing your name
- Where answer options are available, please tick (✓) in the appropriate box for section A up to section G.

### **Contact Address**

If you have any query, please do not hesitate to contact me and I am available as per your convenience at (Name: **SILESHI GEZAHEGN**, Cell phone: 0911391797, Email: [sileshi.tessema@gmail.com](mailto:sileshi.tessema@gmail.com))

*Thank you for sacrificing your precious time in advance!*

**Section A: Personal Profile**

1) *What is your sex?*

❖ *Male*

❖ *Female*

2) *Age (Tick whichever appropriate)*

*20 – 29 Years* [ ]

*30 – 39 Years* [ ]

*40 – 49 Years* [ ]

*50 and over* [ ]

3) *What is your marital status?*

a. *Married*

b. *Single*

c. *Widowed*

d. *Divorce*

4) *What is your academic level?*

a. *Read and Write Only*

b. *Under grade 10*

c. *Grade 10/12 complete*

d. *TEVET graduate*

e. *Diploma*

f. *Degree and above*

5) *For how long have you served in the organization?*

*Less than 2 years* [ ] *2 – 5 years* [ ] *6 – 10 years* [ ] *11 years and more* [ ]

**Section B: Influence of regulatory framework on stock market growth**

1) With regard to regulatory framework on stock market growth, rate the extent to which the influence regulatory framework that has been on stock market growth. Use the scale 1-5 where 1 = No extent, 2= Low extent, 3 = Neutral, 4= Great extent and 5 = Very great Extent

Items	1	2	3	4	5
Government's strategies and policies are clear enough with respect to stock market exchange					
There are legal and regulatory frameworks to regulate the stock exchange of securities					
The commitment of government in pursuing the establishment of stock exchange markets is visible					
The legal infrastructure and regulation framework is comprehensive					
The regulatory framework pertaining to share companies are up to date					
Inadequate and lack of regulatory frameworks to take care of the regulation and supervision activities					
To what extent do capital requirements hinder firms from listing in the stock exchange					
Regulatory framework increases customer's confidence					

**Section C: Influence of technology on stock market growth**

2) With regard to technology on stock market growth, rate the extent to which the influence of technology that has been on stock market growth. Use the scale 1-5 where 1 = No extent, 2= Low extent, ,3 = Neutral, 4= Great extent and 5 = Very great Extent

Items	1	2	3	4	5
Technological infrastructure of the country is in its development stage					
Using of state of art technology and communication network across the country					
Electronic trading has impacted positively on stock market Growth					
The No. of securities traded have increased in stock exchange after automation					



**Section D: Corporate governance influences on stock market growth**

3) To what extent do you agree with the following statements regarding corporate governance influences on stock market growth? Use the scale 1-5 where 1 = No extent, 2= Low extent, ,3 = Neutral, 4= Great extent and 5 = Very great Extent

Items	1	2	3	4	5
Low level of corporate governance					
The governing laws on corporate governance are not up-to-date					
Management provides adequate information when making accountability					
There is stakeholder participation during accountability					
The degree of participation during the accountability process leads to compliance					
The accountability process is used as a means of assessing resource allocation					
Staff are aware of the policies, laws and regulations					
Board members possess the required knowledge and skills required to perform their roles					
Board members have the capacity to develop policies and procedures					
Well-developed regulated stock exchange market					

**Section F: Capital inflow influences on stock market growth**

4) To what extent do you agree with the following statements regarding capital inflow affects stock market growth? Use the scale 1-5 where 1 = No extent, 2= Low extent, ,3 = Neutral, 4= Great extent and 5 = Very great Extent

Items	1	2	3	4	5
Market size to utilize resources efficiently and exploit economies of scale					
High risk of exchange rate fluctuations due to the significant amount of stock					
Successful economic policies and a consequently stable macroeconomic environment					
Trade openness to the stock market exchange					
The growth of pension institutions funds drive to stock market development					
Promotes efficient financial system					

**Section G: Effects of stock market growth on stock exchange**

5) To what extent do you agree with the following statements regarding effects of stock market growth on stock exchange? Use the scale 1-5 where 1 = No extent, 2= Low extent, 3 = Neutral, 4= Great extent and 5 = Very great Extent

<b>Items</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Low awareness level of the society about stock exchange markets					
Lack of public trust about stock exchange markets					
Willingness and initiation from the government in the establishment of stock exchange market in Ethiopia					
Inadequate/absence/ of regulation of stock market and related activities in the country					
Lack /inadequate/ level of qualified and skilled human resource to exert stock market					
Inadequate communication network across the country					
Inadequate/absence/ of regulation of stock market and related activities					

**Thank You!**