

**-THE DETERMINANTS OF CAPITAL MARKET DEVELOPMENT IN
TANZANIA: THE CASE STUDY OF DAR ES SALAAM STOCK EXCHANGE**

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CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by the Open University of Tanzania a dissertation entitled: ***“The Determinants of Capital Market Development in Tanzania, The Case Study of Dar es Salaam Stock Exchange”*** in partial fulfilment of the requirements for the degree of Master of Business Administration (Finance) of the Open University of Tanzania.

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DECLARATION

I, **Penford Hashim Msangi** do hereby declare that this work has not been previously submitted and approved for the award of a degree by this the Open University of Tanzania or any other university .To the best of my knowledge and belief the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself.

DEDICATION

This dissertation is dedicated to my amazing kids, Kenson Msangi and Goodluck Msangi let them be wise beyond their years.

ACKNOWLEDGEMENTS

The accomplishment of this dissertation involved material and moral support from different people and institutions. It is not possible to mention all of them here. The few mentioned here are just representative.

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ABSTRACT

This study sought to determine the determinants of capital market development in Tanzania. The empirical study was conducted using time series data for the period 1998-2012. This study adopted quantitative approach and employed secondary data of fifteen years, Pearson correlation test was used to evaluate the relationship between the variables. Furthermore, this study used multiple regression analysis by applying Ordinary Least Square (OLS) method. The macroeconomic variable data involved were stock market liquidity, investment, the banking sector development and foreign direct investment. For capital market development indicators, market capitalization, listed companies, value traded and turnover ratio were considered. The regression results demonstrate that investment, banking sector development and foreign direct investment are important determinants of capital market development in Tanzania. However, the study found out that there was no relationship between capital market development and stock market liquidity. The findings from Ordinary Least Square (OLS) indicated that the model is significant in a whole. The study recommends the following policies among others; the government should regulate and control financial sector in order to promote the capital market development. Policy maker should cut off restriction for the foreigner investors and to create strategies to increase the foreign direct investment and offer incentives. The study further recommends that the government needs to provide policies that retain reasonable interest rates and it should also provide more efforts in the infrastructures, especially electricity, telecommunication and roads across the regions in order to retain more investors.

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LIST OF ABBREVIATIONS

ANOVA	:	Analysis of Variance
BOT	:	Bank of Tanzania
BSD	:	Banking Sector Development
CAPM	:	Capital Asset Pricing Model
CMD	:	Capital Market Development
CMSA	:	Capital Market and Security Authority
DSE	:	Dar es Salaam Stock Exchange
EADB	:	East African Development Bank
EMF	:	Efficient Markets Theory
FDI	;	Foreign Direct Investment
GDP	:	Gross Domestic Product
ICAPM	:	Inter-temporal Capital Asset Pricing Model
IMF	:	International Monetary Fund
INV	:	Investment
LDC	:	Less Developed Countries
MENA	:	Middle Eastern and North African
MOF	:	Ministry of Finance
MPT	:	Markowitz Pricing Theory
NBS	:	National Bureau of Statistics
NMB	:	National Microfinance Bank
OLS	:	Ordinary Least Square
SADC	:	Southern African Development Community
SML	:	Stock Market Liquidity

SPSS	:	Statistics Package for Social Sciences
TATEPA	:	Tanzania Tea Package
TBL	:	Tanzania Breweries Limited
TCC	:	Tanzania Cigarette Company
TOL	:	Tanzania Oxygen Limited
WB	:	World Bank

CHAPTER ONE

1 0 INTRODUCTION

1.1 Background of the Study

Determining capital market development requires not only an understanding of its main determinants but also a clear definition of what ‘Capital market development’ means and how progress toward it can be measured. However, Capital market development is a multi-dimensional ideal, difficult, complex and long-term process. The concept of CMD being large and liquid is not enough for a capital market to be developed. Furthermore, to be large and liquid relative to the economy; the market should not be overly concentrated. However, it should be strongly linked to the real sector and should develop in proportion to economic activities. Also, capital market development can be considered as the performance of stock market which is based on the increase or reduction in stock prices or returns (El-Wassal, 2013).

In addition, the CMD is measured by using listed companies, market capitalization; values traded and turnover ratio (Garcia and Liu, 1999). A large pool of studies have used market capitalization as a percentage of Gross Domestic Product (GDP) to measure capital market development because it is believed to be a better proxy and less arbitrary than other individual measures of capital market development (Yartey, 2008).

As identifying the proper factors that influence the capital market development has been a subject of debate among economists and financial experts. The question of determinants of capital market development then, becomes important. Therefore,

previous studies viewed the factors from the macroeconomic and institutional factors. These groups have been found to be the most imperative driving forces for the capital market development. Macroeconomic factors include stock market liquidity, income level, saving and investment, banking sector development, foreign capital investment, supply and demand factors. On the other hand, institutional factors are property laws, clearance and settlement issues, transparency and the inside information problems, accounting standards and taxation issues, education and public awareness.

Apart from the above mentioned factors, there are many others like macroeconomic stability, which include real interest rate, inflation, money supply and exchange rate. Also, economic policies include monetary policy, fiscal policy/taxation policy and foreign participation policy. Therefore, based on the above mentioned groups for the determinants of capital market development, my interest on this study was to look on macroeconomic factors. Hence, most of the influential studies carried out used those factors as determinants of capital market development. These studies areas pointed out by Garcial and Liu (1999), Ben Naceuret *al* (2007), Billmeier and Massa (2007), Yartey (2008), Cherif and Gazdar (2010), Kemboi *et al*(2012), Aduda J.*et al* (2012) and El-Wassal, (2013), John and Duke (2013). The next section discusses the two regulators known as Capital Markets and Securities Authority (CMSA) and Dar es Salaam Stock Exchange (DSE). These two bodies enable the proper function of the securities business in Tanzania by providing the necessary environment for the growth of market and confidence of the investors in the market and the listed companies at the DSE.

1.1.1 Capital Markets and Securities Authority

The history of organized capital markets in the country dates back to 1995 when CMSA were established. CMSA is a government agency established to promote and regulate securities business in the country. It was established under capital markets and securities Act 1994. The legal framework for the regulation of the securities industry is the capital markets and securities Act, 1994 [Act No;5 of 1994 as amended by Act No ;4 of 1997] .The Act is supplemented by various regulations that are promulgated by the Minister of Finance. CMSA mission is to design and implement purposeful measures which will enable the creation and development of sustainable capital markets that are efficient, transparent, orderly, fair and equitable to all. CMSA has a board of directors consisting of a chairman appointed by the President of the United republic of Tanzania; Five members of the authority are ex-officio members while the remaining four are appointed by the Minister of Finance. Its information followed comprehensive financial sector reforms in early 1990s that were aimed at, among others, developing capital markets to provide appropriate mechanism for mobilizing long term savings and ensuring its efficient allocation to the productive sector, thus fueling economic growth (CMSA, 2006). Since its establishment, the CMSA has initiated different activities aimed at developing the Tanzanian capital market.

1.1.2 Dar es Salaam Stock Exchange (DSE)

The Dar Es Salaam Stock Exchange (DSE) is a stock exchange located in Dar es Salaam, the largest city in Tanzania. It was incorporated in September 1996 and trading started in April 1998.It is a member of the African Stock Exchanges

Association. DSE marked important objectives toward the capital market development in Tanzania for the mobilization and allocation of long term capital to the private sector. In December 1999, four companies were listed on the DSE. There were Tanzania Oxygen Limited (TOL), Tanzania Breweries Limited (TBL) and TATEPA. These have raised a combined equity capital of TZS 28.57 billion (35.71 million US dollars) in the primary market. The fourth company, East African Development Bank has raised an amount of TZS 10 billion (12.5 million US dollars) through the issue of a four year corporate bond. There have been significant changes in the economy since the establishment of DSE. A number of indicators show growth in numbers of listed companies and market capitalization since 1998 and currently there are 17 registered companies in Tanzania. These have increased Small and Medium Enterprises (SMEs) and also large enterprises in the country.

From the explanations above, note that the contribution of DSE in the economy of the country, capital markets in Tanzania are contributing about 8 % of the GDP. The increase resulted from the rise in the number of market players in the industry, and the percentage is destined to increase given the envisaged growth momentum of capital markets in Tanzania. There is no doubt that CMSA has played an important role in promoting and developing an efficient and transparent capital market in Tanzania. Tanzania Breweries limited (TBL), Tanzania Cigarette Company (TCC) and National Microfinance Bank (NMB) have done very well in the market. Local investors participated actively in the market managing to carry out deal worth Tshs 97.8 billion compared to Tshs 89.23 billion raised between January and March 2012 (DSE-index, 2012).

In additional, increase of equities, corporate bonds and government bonds which are trading on the DSE generate investments and raise capital. For this reason, the creation of the first stock exchange has brought an important capital market development evolution in the country. The government of Tanzania continues to make progress towards improving both the efficiency and absorptive capacity of its domestic debt market. To encourage investors, the government introduced several incentives for capital market development such as corporate tax which was reduced from 30 to 25 %, zero capital gain, stamp duty and withholding tax (DSE, 2008b). The capital market development, therefore, enables financial deepening by enabling the savers to diversity their financial asset basket and the firms to have access to alternative sources of financing. Beckaert *et al* (2005) contends that that capital market development increases economic growth. This is due to the fact that empirical research supports that the macroeconomic and institutional factors are the keys determinants of capital market development.

It is assumed that the determinants of capital market development vary from one country to another country depending on the nature of economic policies, regulatory mechanisms and institutional arrangements. A number of empirical studies support that capital market development promotes economic growth. Therefore, over the past decade studies have shifted to the question of the determinants of capital market development. Understanding both the dynamics and the determinants of the capital market development is not only crucial to understanding the relationship between finance and economic growth, but also has important policy implications

as it sheds light on areas that need government action to make the economic and institutional environment favorable to capital market development.

1.2 Statement of the Problem

The determinants of capital market development vary from one country to the other depending on the nature of economic policies, regulatory mechanisms and institutional structures (Kemboi, 2012). Traditionally, most of the researches conducted focused on the relationship between macroeconomic variables and capital market development in developed countries. This means that there is paucity of studies conducted in developing countries like Tanzania. Therefore, this motivated to carry out a research in developing capital market instead of developed capital market in order to clarify the relationship between macroeconomic variables and capital market development in Tanzania.

Furthermore, there have been significant changes of capital market development in Tanzania. For instance, the increase in the allocation of resources and capital mobilization for long-term investment, the increase of listed companies, currently DSE, has more than 17 registered companies where by the total market capitalization, value traded and turnover increased and generated economic benefits including higher productivity growth, many employment opportunities and improved macroeconomic stability, hence, contributing about 8% of the GDP in country. There are four quantitative variables used in this study. There are stock market liquidity, investment, banking sector development and foreign direct investment. In addition, macroeconomic variables are vital in measuring the

performance of capital market development. It is useful for the investors to analyze their investments based on the current stock market trend. Without the existence of macroeconomic variables, the investors cannot decide clearly when they should enter or pull out from the stock market. Therefore, the question is whether the development is in any way associated with these factors and if so to what extent. It is for this reason that the study determined the determinants of capital market development in Tanzania.

1.3 Objectives of the Study

1.3.1 General Objective

The main objective of the study was to determine the determinants of capital market development in Tanzania the case being Dar es Salaam Stock Exchange (DSE)

1.3.2 Specific Objectives

This study was guided by the following specific objectives:

- i. To examine the extent to which Stock Market Liquidity influences Capital market Development in Tanzania over the period of 1998-2012.
- ii. To examine the extent to which Investment influences Capital Market Development in Tanzania over the period of 1998-2012.
- iii. To examine the extent to which Banking Sector Development influences Capital Market Development in Tanzania over the period of 1998-2012.
- iv. To examine the extent to which Foreign Direct Investment influences Capital Market Development in Tanzania over the period of 1998-2012.

1.4 Research Questions

The study was guided by the following questions:

- i. To what extent does the Stock Market Liquidity influence on Capital market Development in Tanzania over the period of 1998-2012?
- ii. To what extent does the Investment influence on Capital Market Development in Tanzania over the period of 1998-2012?
- iii. To what extent does the Banking Sector Development influence on Capital Market Development in Tanzania over the period of 1998-2012?
- iv. To what extent does the Foreign Direct Investment influence on Capital Market Development in Tanzania over the period of 1998-2012?

1.5 Significance of the Study

The findings arrived in this study are expected to provide valid answers to the managements of CMSA and DSE in developing capital market in Tanzania. Also the findings of this study are anticipated to help the government, organizations, potential investors, shareholders, scholars and academicians, policy makers and business practitioners to find ways to improve the capital markets development in Tanzania. For instance, in his government, the study would act as a guide for the government future policy changes in deepening the financial and capital markets. It also assists the government in influencing whether to inject more funds or reduce funds to the organization in terms of future investments.

Furthermore, in terms of potential investor's perspective, the study would expect to give the major reasons why an individual might be convinced to invest into a company that is listed at the stock exchange. It also assists the investors in decisions

making concerning the company financial positions and its performance. The findings of the study are further extended to influence strategic decision making of organizations that are intending listing at the exchange and on the factors that might influence the decision to go public. The study would be valuable to shareholders who are interested in determining the effect of certain economic variable in the market. It also assists to evaluate the performance, financial position of the company and the potentiality of increase of the company.

Scholars and academicians may use this study to carry out further researches in this field of finance and also may help them as a reference in the future endeavours in the field of academics. The study is also expected to add knowledge into the growing body of work in capital markets. The study is also for the accomplishment of the Master of Business Administration of the Open University of Tanzania.

1.6 Organization of the Study

This study is organized into five chapters. Chapter one is an introduction, made up of the background of the study, statement of the problem, objectives of the study, research questions, significance of the study and the organization of the dissertation. Chapter two provides the literature review on related to the topic under study. It first defines terms used in the study; it further explains the theoretical review, empirical literature review and the conceptual framework of the study. Chapter three describes the design methodology used in the study while chapter four is the heart of the study. It presents the findings of the study and discussion on findings. Furthermore, chapter five is a concluding chapter.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter reviews and analyses the related literature on the determinants of capital market development. The chapter is divided into eight sections; Section 2.2 provides the Theoretical literature review, Section 2.3 describes the conceptual framework and section 2.4 explains the empirical literature review while Section 2.5 explains the Statements of the study hypotheses. Section 2.6 concentrates on testing the study hypotheses and Section 2.7 deals with the focus of the present study. The last section 2.8 provides the summary of the chapter.

2.2 Theoretical Literature Review

Generally, the purpose of literature is to summarize, analyze and review on the theoretical articles or empirical studies carried out by previous researchers relating to the research title. At the same time, a deeper understanding can be developed by comparing different results found by the previous researchers. The next subsection focuses the definition of key concepts or terms

2.2.1 Definitions of Terms

This section defines key concepts or terms used in the study. These terms are capital market and capital market development.

2.2.1.1 Capital Market

The rate of development in the understanding the nature of capital market at both the theoretical and empirical levels has been extremely rapid in recent years. A king

bohung be (1996) defines Capital market as the market where medium and long terms finance can be raised and Capital market offers a variety of financial instruments that enable economic agents to pool, price and exchange risk. Through assets with attractive yields, liquidity and risk characteristics, it encourages saving in financial form.

Al-Faki (2006) argues that Capital market is a network of specialized financial institutions, series of mechanism, processes and infrastructure that in various ways facilitate the bringing together of supplies and users of medium to long term capital for investment in economic project. In the opinion of Ekezie (2002), Capital market is the market dealing with lending and borrowing in long-term loan able funds. On his part Emekekwe (2009) defines capital market as part of the financial market that facilities for transfer of medium and long-term funds to various economic units.

2.2.1.2 Capital Market Development

Capital market development is defined as a process of improvements in the quantity, quality, and efficiency of stock market services and it has been significant interest in many developing countries in the last twenty year or so, and evidence of the role of financial markets in economic development is well documented. CMD has been believed as an important goal, as growing evidence supports the view that a sound financial system is not just correlated with a healthy economy but actually causes economic growth (Samathanet *al* 2013).

Furthermore, capital market development can be considered as the performance of stock market which is based on the increase or reduction in stock prices or returns.

Cherif and Gazdar (2010) define the Capital market development as an integral part of financial development, which is, in turn, associated with economic growth and it is normally measured by the Number of Listed Companies, Market Capitalization (percentage of GDP), Value Traded (percentage of GDP) and Turnover (percent). In the opinion of John and Duke (2013), Capital market development is a multidimensional concept and El-Wassal (2013) argues that Capital market development is a difficult, complex, multi-faceted, and long-term process. The main index and market indicator in Tanzania stock market is Dar es Salaam Stock Exchange Index (DSEI) which provides information concerning the stock market as well as its performance and trend. The main market in DSEI consists of 17 companies with full market capitalization. Therefore, in this case, investors can even access the information of companies to get ideas regarding the current market trend before involving in a transaction. The study adopted same definition in determining the determinant of CMD in Tanzania. The next section illustrates the theories used in the capital market development.

2.2.2 Theories of Capital Market Development

This section presents the theories of capital market development. There are six basic theories of capital market development namely Calderon-Rosell theory, Efficient Markets Theory (EMT), Capital Asset Pricing Theory, Capital Market Theory, Inter-temporal Capital Asset Pricing Model (ICAPM) and Markowitz Pricing Theory (MPT).

2.2.2.1 Calderon-Rosell Theory

Calderon-Rosell (1991) developed a model or theory which explored the main determinants of capital market development. To date, this model represents the most serious attempt to build up the foundations of financial theory of CMD. In this model, stock market liquidity and economic growth are considered as main indicators. Yartey (2008) tailored the Calderon-Rosell model to incorporate other factors that might influence the capital market development. The determinants are categorized into two sets known as macroeconomic and institutional factors. Macroeconomic factors include savings, income level, the banking sector development, private capital flows, investment, stock market liquidity and macroeconomic stability. The Institutional variables are corruption, law and order, democratic accountability and quality of bureaucracy.

2.2.2.2 Efficient Market Theory (EMT)

The Efficient Markets Theory (EMT) is a theory that explains the capital market development. This theory was developed by Fama in 1965 and was used by Ewahet *et al* (2009), Hodnett and Hsieh (2012). It states that the price of an asset reflects all relevant information available about the intrinsic value of the asset known as present value of the cash flows the owner of the security expects to receive. However, the profit opportunities represented by the existence of undervalued and overvalued, stocks motivate investors to trade and their trading moves the prices of stocks toward the present value of future cash flows. Again, Fama E. (1991) pointed out that market efficiency is a continuum because the lower the transaction costs in a market including the cost of obtaining information and trading, the more efficient

the market. The informational efficiency of stock prices matters in two ways. First, investors care about whether various trading strategies can earn excess return that is to say beat the market. Second, if stock prices accurately reflect all information, new investment capital market goes to its highest-valued use as a result the capital market development goes up. The author further mentioned three different forms of market efficiency such as weak form, semi-strong form and strong form. Each form of Efficient market Theory has ability to rule out the possibilities of consistent outperformance by a certain group of investors who use certain type of information as the tool in their trading activities. However, under assumption of efficient Capital markets, all investors are risk averse and completely rational in making their decisions.

2.2.2.3 Capital Asset Pricing Theory

The specific equilibrium model of interest to many investors is known as the Capital Asset Pricing Theory, typically referred to as the CAPM. The CAPM of William Sharpe (1964) and John Linter (1965) marks the birth of asset pricing theory (resulting in a Nobel Prize for Sharpe in 1990). The attraction of the CAPM is that it offers powerful and intuitively pleasing predictions about how to measure risk and relation between expected return and risk. It allows people to measure the relevant risk of individual securities as well as to assess the relationship between risk and the returns expected from investing. The CAPM is attractive as an equilibrium model because of its simplicity and its implications. As a result of serious challenges to the model over time, however, alternatives have been developed. The primary alternative to the CAPM is the Arbitrage Pricing Theory, or

APT, which allows for multiple sources of risk. While the CAPM is a simple model that is based on sound reasoning, some of the assumptions that underlie the model are unrealistic. Some extensions of the basic CAPM were proposed that relaxed one or more of these assumptions (Black, 1972). Note that no matter how much investment can be diversified, it is impossible to get free of all the risk.

2.2.2.4 Capital Market Theory

Capital market theory followed modern portfolio theory by Markowitz, as researchers explored the implications of introducing a risk-free asset. Sharpe is generally credited with developing the CAPM, but Lintner and Mossin derived similar models independently in the mid 1960s. Assumptions made regarding Capital Market Theory include: All investors are Markowitz efficient investors who choose investments on the basis of expected return and risk, investors can borrow or lend any amount at a risk-free rate of interest; all investors have homogeneous expectations for returns. The capital market theory is a model that seeks to price assets, most commonly, shares. Capital market theory sets the environment in which securities analysis is performed. Capital market theory is a positive theory in that it hypothesizes how investors do behave rather than how investors should behave, as in the case of modern portfolio theory (MPT)

2.2.2.5 Inter-temporal Capital Asset Pricing Model (ICAPM)

The CAPM is static, or single –period models. As such, it ignores the multi-period nature of participation in the capital markets. Merton's (1973) inter-temporal capital asset pricing model (ICAPM) was developed to capture this multi-period aspect of

financial market equilibrium. The ICAPM framework recognizes that the investment opportunity set might shift overtime, and investors would like to hedge themselves against unfavorable shifts in the set of available investments. If a particular security tends to have high returns when bad things happen to the investment opportunity set, investors would want to hold this security as a hedge. This increased demand would result in a higher equilibrium price for the security (all else constant). One of the main insights of the ICAPM is the need to reflect this hedging demand in the asset pricing equation.

2.2.2.6 Markowitz Pricing Theory (MPT)

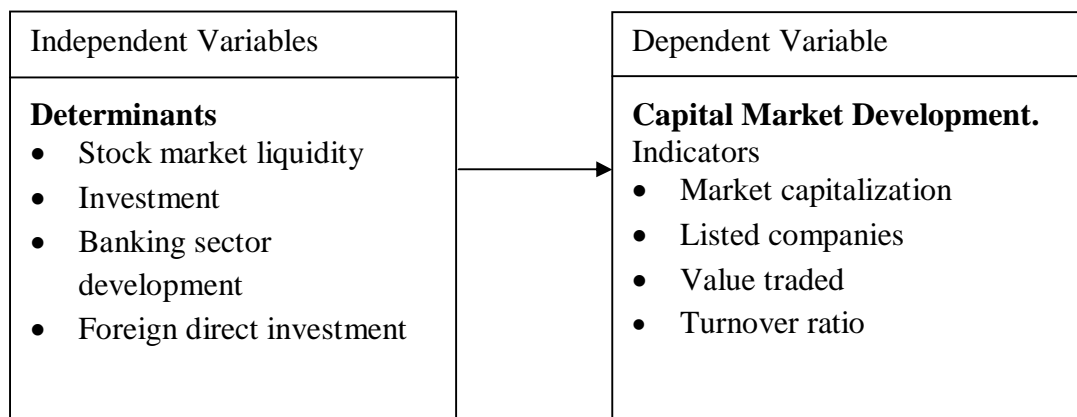
Capital market theory is built on the Markowitz portfolio theory. Any discussion of the theory of stock price behaviour has to start with Markowitz (1952, 1959). The Markowitz model is a single –period model, where an investor forms a portfolio at the beginning of the period. The investor’s objective is to maximize the portfolio’s expected return, subject to an acceptable level of risk (or minimize risk, subject to an acceptable expected return). The assumption of a single time period, coupled with assumptions about the investor’s attitude toward risk, allows risk to be measured by the variance (or standard deviation) of the portfolio’s return. Building on the Markowitz framework, Sharpe (1964), Lintner (1965) and Mossin (1966) independently developed what has come to be known as the Capital Asset Pricing Model (CAPM). This model assumes that investors use the logic of Markowitz in forming portfolios. Capital market theory therefore involves a set of predictions concerning equilibrium expected returns on risky assets .It is typically derived by making some simplifying assumptions in order to facilitate the analysis and help to

understand the arguments without fundamentally changing the predictions of assets theory.

2.3 Conceptual Framework of the study

Conceptual framework is the framework which contains the dependent and independent variables in the study in order to help the researcher to identify the problem easily. Kombo and Tromp (2006). According to them, dependent variables are variables that are influenced by variations that occur in another variable. Independent variables are variables that influence other variables. In this study, the independent variable that is determinants of capital market development are the macroeconomic factors. On the other hand the dependent variable is the capital market development.

Figure 2.1 : Conceptual Framework



Source: Own developed model, (2015).

2.4 Empirical Literature Review

The difference views on finance and development nexus has led to a wide range of empirical studies. In this study, the empirical literature review is discussed in the

two ways. These ways are studies on capital market development (developed countries) and local studies on capital market development.

2.4.1 Studies on Capital Market Development

Garcia and Liu (1999) investigated the macroeconomic determinants of capital market development. They used panel data from 15 industrial and developing countries for the period 1980-1995 (sample of Latin America and Asian countries, Japan and the USA). The findings of their study revealed that real income level, saving rate, financial intermediary development and stock market liquidity are important determinants of capital market development, while macroeconomic stability does not have any explaining power. The study concluded that banks and markets are complementary rather than substitutes. At the same time, they argued that an increase in income level and financial intermediary development can enhance the capital market development. According to them, when the development of banking system is favourable, it does contribute significantly to capital market development because it can facilitate the transactions between investors and stock market.

Ben Naceret *al* (2007) investigated the macroeconomic determinants of capital market development in the Middle Eastern and North African (MENA) region .The study was conducted by using an unbalanced panel data from twelve MENA countries, fixed and random effect specification employed. The findings revealed that saving rate, financial intermediary, stock market liquidity and the stabilization variable are the important determinants of capital market development,

Furthermore, they found that financial intermediaries and capital market are complements rather than substitute in the growth process. The research came up with some policy implication for MENA countries for the purpose of capital market development in the region. It is better to encourage savings by appropriate incentives, to improve stock market liquidity, to develop financial intermediaries and to control inflation.

Billmeier and Massa (2007) assessed the macroeconomic determinants of capital market development. They used the panel data of seventeen countries in the Middle East and Central Asia and employed a fixed –effect panel regression. The findings revealed that both institutions and remittances have a positive and significant impact on capital market development. In the institutions approach characterized as legal systems which include transparency, contract enforcement, as well as protection of property rights is important for the capital market development.

Yartey and Adjasi (2007) examined the Capital market development in Sub-Saharan Africa. The study used unbalanced panel data from 14 African countries. The regression model used to compute data. The finding suggests that well developed banking sector, macroeconomic environment, accounting institutions and shareholder protection are necessary determinants of Capital markets development in Africa. Also, the study offered some suggestions in order to develop the capital markets in Africa. The suggestions included 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.

Furthermore, Yartey (2008) examined the macroeconomic and institutional determinants of capital market development. He used a Secondary panel data from the period of (1990 -2004) and represented by 42 countries. Calderon-Rossell model was used. The study found that gross domestic investment, private capital flows, stock market liquidity, income level and banking sector development are important determinants of capital market development. The findings further revealed that the institutional factors such as political risk, law and order, and bureaucracy quality are important determinants of capital market development. Based on his findings, he suggested that at early stages of its development, the banking sector is a complement to the capital market in financing investment. However, as they both develop, banks and the capital market begin to compete with each other as vehicles for financing investment and also the resolution of political risk can encourage investor confidence and propel the growth of the capital market.

Cherif and Gazdar (2010) investigated the macroeconomic and institutional determinants of capital market development. They used panel data from MENA countries from 1990 to 2007. By using both panel data and instrumental variable techniques (fixed and random effects specification), they found that income level, saving rate, stock market liquidity, and interest rate influence capital market development. The findings further found out that the banking and capital market sectors are complementary instead of being substitutes. They recommended that a

well-developed banking sector is important for the capital market development in the region and play a vital role in promoting the capital market as demonstrated by the experience of many East Asian countries. Domestic saving is also an essential determinant of capital market development.

Yartey (2010) focused on institutional and macroeconomic determinants of stock market development using a panel data of 42 emerging economies for the period 1990 to 2004. He used a modified calderon-Rossel partial equilibrium model of stock market growth. The findings indicated that macroeconomic determinants such as income level, domestic investment, foreign direct investment, banking sector development and stock market liquidity are important for stock market development while in institutional factors including Political risk, law and order, bureaucratic quality and democratic accountability are important determinants of stock market liquidity.

Khorshidi and Hoseini (2010) analysed the macroeconomic determinants of capital market development, the case being Iran. The study used time series and traditional econometrics (OLS) models. The empirical result revealed that macroeconomic factors such as income level, saving, investment rate, financial intermediary development, stock market liquidity and macroeconomic instability and institutional factors represented by property laws, clearance and settlement issues, transparency and the inside information problems, taxation issues and accounting standards are important determinants of capital market development. The study recommended that a proper structure should be made to push national income to capital market

and due to promotion of investment rate; the investment share of national income must be increased. It also recommended that along with the effect of financial intermediaries, privatization is an accurate policy to expansion.

Kemboi and Tarus (2012) examined macroeconomic determinants of capital market development in Kenya over the period 2000-2009. The study used quarterly secondary data. The hypothesis on the co-integrated relationship between capital market development and macroeconomic determinants was examined using Johansen-Julius co-integration technique. Although an error correction model was used in estimating the relationship between macroeconomic factors, on the one hand and capital market development on the other. The findings indicated that macroeconomic factors comprising income level; banking sector development and stock market liquidity are important determinants of the Nairobi Stock Market. The findings also depicted that macroeconomic stability is not a significant forecaster of the development of the securities market.

Aduda and Onsongo (2012) investigated the determinants of development in the Nairobi Stock Exchange (NSE). Secondary data from 2005 to 2009 were employed. The regression modal was used to determine the factors influencing the development of the NSE. The findings indicated that macroeconomic variables such as stock market liquidity, institutional quality, income per capita, domestic savings and banking sector development were important determinants of stock market development in the Nairobi Stock Exchange. The regression analysis found that there was no relationship between stock market development and macroeconomic

stability (inflation) and private capital flows. The findings for institutional quality revealed that law and order, bureaucratic quality, democratic accountability and corruption index were important determinants of stock market development as they enhance the viability of external finance. The study also recommended that the share of bank lending which goes to the private sector ought to be increased to avoid public sector programmes crowding out private investment financed through financial saving. It also recommended that the government should address constraints affecting domestic saving and policy approaches should be geared toward strengthening the banking legal infrastructure.

El-Wassal (2013) provided a conceptual framework for the determinants of capital market development and explained the general concept of capital market development. The study suggested five dimensions for assessment and proposed four sets of variables that shape or determine capital market development. The variables were institutional factors, supply factors, demand factors, and economic policies. In addition, supply and demand factors stood as building block of capital market, the institutional factors and economic policies stood as supporting block.

The study concluded by highlighting three principles. These principles are first, capital market development is a difficult, complex, multi-faceted, and long-term process. The second principle is capital market development is only part of the overall development of a country's financial system, and third, capital market development is mainly a private sector activity.

Abdelbaki (2013) investigated the relationship between macroeconomic variables and Bahraini stock market development. He used the Autoregressive Distributed Lag model. The study found that income, investment, banking sector development, private capital flows and stock market liquidity are important determinants of Bahraini stock market development. According to the study as the market is liquid, the stock price will change from time to time whereas investors can gain profits from stock market in which it increases the income level of investors.

2.4.2 Local Studies on Capital Market Development

Ziouklui (2001) investigated capital market development and growth in Sub-Saharan Africa in the case being Tanzania. The study used secondary and primary data which were collected through field work questionnaires and interviews. Descriptive statistical tests and econometric were used to analyse the capital markets in Tanzania. The study found that region integration and globalization of the Tanzania capital market attracted foreign capital, efficiency of utilization of capital and corporate governance. Furthermore, the findings revealed that the CMSA is effective in promoting good corporate governance in Tanzania and share price movement is a valuable way of demanding accountability from listed companies. Also, the study found that policy changes have a positive impact on capital market development in Tanzania

Elliott (2008) examined the macroeconomic determinants of capital market development in particular market capitalization as a percentage of GDP. The study used a pooled panel data set from nine developing countries within the Southern

African Development Community (SADC) region from 1992 to 2004. The findings supported those of Garcia and Liu, (1999) who found out that the indicators of financial intermediary development, the value of shares traded as percentage of GDP, real income, saving rate, stock market liquidity and the macroeconomic instability are the main determinants of capital market development. The following section demonstrates the statements of the study hypotheses.

2.5 Statement of the Study Hypotheses

There are four main independent variables which have been classified in this study such as Stock Market Liquidity (SML), Investment (INV), Banking Sector Development (BSD) and Foreign Direct Investment (FDI) as the determinant of capital market development in Tanzania. As a result, the four main hypotheses are formed.

2.5.1 The Link between Stock Market Liquidity and Capital Market Development

Most of the reviewed studies on stock market liquidity and capital market development suggest a link between stock market liquidity and the development of capital market. Aduda J.*et al* (2012) and Kamal, (2013) opine that one of the important aspects of capital market development is liquidity, which can be obtained using value shares traded as a percentage of GDP. It measures the liquidity of the company's share, which is the easy at which the firm's shares are bought and sold. The quicker and easier it is to buy or sell the share on the market, the more accurate the price reflects all available information. Efficient Market Theory (EMT) also support this positive link between stock market liquidity and capital market

development since it states that the price of an asset reflects all relevant information available about the intrinsic value of the asset known as present value of the cash flows the owner of the security expects to receive. According to the theory, when firm's share prices reflect all the available information, the firm's transaction costs will go down and this is expected to have a positive impact on the capital market development. If there is lack of information sharing among firm listed, this will cause negative impact to capital market development. Some authors support the view that liquidity in the stock market is good for the capital market development (Levine and Servos, 1998, Yartey, 2008). It is therefore hypothesized that:

Hypothesis, No.1: There is a positive relationship between Stock Market liquidity and Capital Market Development in Tanzania.

2.5.2 The Link between Investment and Capital Market Development

The Inter-temporal Capital Asset Pricing Model or Theory (ICAPM) framework recognizes that the investment opportunity set might shift overtime, and investors would like to hedge themselves against unfavourable shifts in the set of available investments. If a particular security tends to have high returns when bad things happen to the investment opportunity set, investors would want to hold this security as a hedge. This increased demand would result in a higher equilibrium price for the security (*Ceteris paribus*). Therefore, as per this theory, investment and capital market development are positive associated. Based on the reviewed studies, it is proposed that there is a link between investment and capital market development. Investment has been found to be an important determinant of capital market development because it represents one way to intermediate savings to investment

projects (Cherif and Gazdar, 2010).), Olomola,(1997), Obadan and Odusola, (1999)they suggested a positive and significant relationship between Investment and Capital market development. In principal, the capital market is the hub of investment and capital formation in a market oriented economy and also it is believed that a well-developed capital market leads to increase in investment which in turn stimulates growth. It is therefore hypothesized that:

Hypothesis, No.2: There is a positive relationship between investment and capital market development in Tanzania.

2.5.3 The Link between the Banking Sector Development and Capital Market Development

The banking sector is a key player in the economic development process and in the capital market development as it affords investors with liquidity by advancing credit, and facilitating savings. Garcia and Liu, (1999) and Nacueret *al* (2007) recognized that there is a positive relationship between banking sector development and capital market development. Yartey (2008) adds to a positive relationship. However, it was found that a bank sector development may have negative effects because stock markets and banks tend to substitute one another as financing sources. Therefore, the banking sector development is proxy by the total value of domestic credit provided by the commercial bank credit to the private sector as a percentage of GDP: Then it can be finalized that the rise in commercial banks credit provided to the private sector has a chance to the contribution of capital market development. It is therefore hypothesized that:

Hypothesis, No.3: There is a positive relationship between the banking sector development and capital market development in Tanzania

2.5.4 The Link between Foreign Direct Investment and Capital Market Development

A major source of investment inflow for a developing country is foreign direct investment and in order to boost economic development of any country the capital market development is imperative. Foreign direct investment is an important source of capital market development and it can also play its role in raising domestic savings in the country through the creation of job and enhancement of technology transfer (Singh, 1997). Furthermore, without foreign direct investment it would be difficult to obtain such a large capital through the country's own domestic savings. According to Adam and Tweneboah, (2009), Claessens, Klingebiel *et al* (2001), in addition, Kalim and Shahbaz, (2009) found positive and statistically strong relationship between foreign direct investment and capital market development. Moreover, foreign direct investment is measured by using private capital flows as a percentage of GDP. Errunza (1982) states that the long term impact of foreign capital inflows on the capital market development is broader than the benefits from initial flows and increased investor participation: It is therefore hypothesized that:

Hypothesis, No.4: There is a positive relationship between foreign direct investment and Capital Market Development in Tanzania.

2.6 Testing the Study Hypotheses

The four set of paired hypotheses were tested statistically at 5% and 10% levels of significant. The tested hypotheses are as presented below.

Hypothesis 1: The Link between Stock Market Liquidity and Capital Market Development

It is hypothesized that stock market liquidity is positively associated with capital market development. The hypotheses tested are:

Null Hypothesis $H_0: \beta_1 = 0$ There is no significant relationship between the stock market liquidity and capital market development in Tanzania.

Alternative Hypothesis $H_1: \beta_1 \neq 0$ There is a significant relationship between the stock market liquidity and capital market development in Tanzania.

Therefore, the variable was tested at both of 5% and 10% level of significant.

Hypothesis 2: The Link between Investment and Capital Market development

It is hypothesized that investment is positively associated with capital market development. The hypotheses tested are:

Null Hypothesis $H_0: \beta_2 = 0$ There is no significant relationship between the investment and capital market development in Tanzania.

Alternative Hypothesis $H_1: \beta_2 \neq 0$ There is a significant relationship between the stock market liquidity and capital market development in Tanzania.

Thus, the variable was tested at 0.10 level of significant.

Hypothesis 3: The Link between Banking Sector Development and Capital Market Development

It is hypothesized that banking sector development is positively associated with capital market development. The hypotheses tested are:

Null Hypothesis $H_0: \beta_3 = 0$ There is no significant relationship between the banking sector development and capital market development in Tanzania

Alternative Hypothesis $H_1: \beta_3 \neq 0$ There is a significant relationship between the banking sector development and capital market development in Tanzania

Banking sector development is another variable tested at 5% level of significant

Hypothesis 4: The Link between Foreign Direct Investment and Capital Market Development

It is hypothesized that foreign direct investment is positively associated with capital market development. The hypotheses tested are:

Null Hypothesis $H_0: \beta_4 = 0$ There is no significant relationship between the foreign direct investment and capital market development in Tanzania.

Alternative Hypothesis $H_1: \beta_4 \neq 0$ There is a significant relationship between the foreign direct investment and capital market development in Tanzania.

Foreign direct investment was tested with the fourth set of the hypotheses. The variable was tested at 5 % and 10% level of significant.

2.7 Focus of the Present Study

Major prior studies which related to the present study include Levine and Zervos, (1998), Garcia and Liu, (1999), Ziorklui (2001), Demirguc-kunt and Levine, (2003), Ben Naceuret *al* (2007), Yartey (2008), Elliott (2008), Cherif and Gazdar, (2010), Kemboiet *al* (2012), as well as El-Wassal (2013). These studies have pointed out the determinants of capital market development in developed and developing countries. However, many of those studies were undertaken in countries other than Tanzania and there were also few studies in Tanzania on this area. Therefore, the present study is attempted to fill this knowledgeable gap by focusing on the determinants of Capital market development in Tanzania using secondary time series data from 1998-2012.

Furthermore, the government initiated financial reforms in the financial sector including capital markets and provided an incentive to attract foreign investments. The establishment of policy for foreigners and privatization moreover boosted the confidence of local and foreign investors for investment decisions in Dar es Salaam Stock Exchange (DSE). The number of listed companies was 2 in 1998 and currently, DSE has more than 17 listed companies which raised the market capitalization of listed companies (% of GDP) for 6.4% in 2012. Therefore, this was thought as another basic motivation to determine the determinants of capital market development in Tanzania for the period of 1998-2012.

Lastly, many of the empirical studies were cross country studies and country specific studies are few. Hence, the current study intended to avoid this swelling

problem by concentrating on a specific country because it is believed that the determinants of capital market development vary from country to country depending on the nature of economic policies, institutional structures and regulatory mechanisms.

2.8 Summary

This chapter reviewed theoretical and empirical literature review and the theories of capital market development have been discussed. The theories discussed are Calderon-Rosell theory, Efficient Markets Theory (EMT), Capital Asset Pricing Theory, Capital Market Theory, Inter-temporal Capital Asset Pricing Model (ICAPM), and Markowitz Pricing Theory (MPT). In theory, capital market is an important platform which allows companies to gain capital while investors obtain certain ownership from the company with the trading transactions. Capital market development can be considered as the performance of stock market which is based on the increase or reduction in stock prices or returns. It can be measured by using listed companies, market capitalization, value traded and turnover ratio.

Furthermore, the proposed conceptual framework was developed in order to identify the connections between imperative variables such as stock market liquidity, investment, banking sector development and foreign direct investment with capital market development as dependent variable. Several empirical studies were examined in the determinants of capital market development. Those studies were of Levine and Zervos, (1998), Garcia and Liu, (1999), Ziorkluei (2001), Ben Naceuret *al* (2007), Yartey (2008), Cherif and Gazdar, (2010), Kemboiet *al* (2012), as well as El-Wassal (2013). Different methods were used to measure the

relationship between macroeconomic variables and capital market development in developed and developing countries.

Lastly, statements and testing study hypotheses and the gap have been discussed. Based on the empirical reviewed studies, many of the studies were undertaken in countries other than Tanzania and there were also very few studies in Tanzania on this area. Therefore, the present study attempted to fill this gap by focusing on the determinants of Capital market development in Tanzania.

Furthermore, the data from DSE show that the number of listed companies has increased from 2 in 1998 to more than 17 listed companies which raised the market capitalization of listed companies (% of GDP) for 6.4% in 2012. Therefore, this is among of the reasons which motivated to determine the determinants of capital market development in Tanzania from 1998-2012. It was discovered this numerous empirical studies were cross country studies and country specific studies are few. Hence, the current study intended to avoid this swelling problem by concentrating on a specific country. The next chapter describes the research methodology used to carry out the study.

CHAPTER THREE

3.0 RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter describes the design and methodology used in the study. The chapter comprises in the nine sections include: section 3.1 provides the introduction while section 3.2 describes the research design, Section 3.3 provides the types and sources of data, Section 3.4 explains the data collection methods and Section 3.5 describes the time framework,. Section 3.6 explains theoretical and empirical model. Furthermore, Section 3.7 provides the definition of variables and measurement procedures. Section 3.8 describes data processing and analysis and lastly section 3.9 summarizes the chapter.

3.2 Research Design

Research design is the researcher's road map to be used for the systematic management of data collection. There are so many ways used to design the research such as exploratory research, descriptive research, and explanatory research or a combination of three (Saunders *et al*, 2007).

This study adopted a quantitative research design. According to Saunders (2012). Research design is the general plan of how to go about answering the research questions. In this study, quantitative design was used because quantitative research design combines the theoretical consideration with empirical observation and focuses on analysis of numerical data. Yartey (2008), Aduda et al (2012), Garcia and Liu, (1999) also applied the related design. This approach led to a description

of the determinants as found from the study in the existing situation. Therefore, the above mentioned design adopted was very appropriate for collecting data concerning the determinants of the Capital markets developments in Tanzania.

Furthermore, in this study on determinants of capital market development in Tanzania, deduction approach was thought the most appropriate option because the study focused on using data to test the theory and ultimately end up with the generalization of the principle and recommendations. Deduction approach has different steps such as theory, hypothesis, data collection, findings and then hypothesis confirmed or rejected and lastly the revision of theory. In the case of this study, the study started with reviewing the capital market development theory with the purpose of getting theoretical and conceptual framework, then to get empirical findings of previous researches. Moreover, this study adopted quantitative research strategy associated with a case study design.

The study was carried out using a case study design. A case as explained by Kothari (2004) is an in-depth study rather than breadth and it places more emphasis on full analysis of a limited number of events or conditions. The study was conducted due to the availability, accessibility, and reliability of the data. In addition, this study was focused more on quantitative research strategy. Quantitative research is generally related with positivism, especially when used with predetermined and highly structured data collection techniques. In addition, the main purpose was to determine the determinants of capital market development in Tanzania which can only be done effectively by applying quantitative research. Quantitative research is

designed for identification and description of variables in order to establish the relationship between them. Therefore, quantitative research strategy allows the researcher to analyze the results by using statistical methods with the help of computer. In case of this study, the data was observed from the period of 1998 to 2012.

3.3 Types and Sources of Data

The study involved secondary data that covered 15 years (1998-2012) as time series data. The data that were collected are; Market Capitalization, Value Traded, Gross Capital Formation, Domestic Credit Provided to Private sector, and Private capital flows. Saunders *et al* (2007) stated that there are several sources of secondary data. The sources of these data used were from Dar es Salaam Stock Exchange (DSE), Capital Markets and Securities Authority (CMSA), Bank of Tanzania (BOT), National Bureau of Statistics (NBS), International Monetary Fund (IMF), the World Bank, and Ministry of Finance. (MOF)-Tanzania.

3.4 Data Collection Methods

The data were collected mainly through reviewed reports and extracted direct from the various reports include Economic survey books from (MOF), economic and operation report from (BOT), National statistics report from (NBS), Quarterly update report from (DSE) and databases of IMF and World Bank websites. These strategies were used because they save time, cost and do not need a team of staff. These data are generally the quantitative variables.

3.5 Time Framework

This study focused on the time frame within year 1998 to 2012. The selection of the study period in this case was based on the year in which the DSE became operational in April 1998 where as previously there was no stocks exchange market body created by the government in Tanzania. Also, it was sufficient time to carry out the analysis because it was the maximum time. Moreover, this was due to availability, accessibility, and reliability of the data for 15 years

3.6 Theoretical and Empirical Model

This study used regression model for data analysis. To justify this, different authors have adopted this type of model including Lazaridis and Troforidis, (2006), Yartey (2008) and Aduda.*J.et al* (2012). Thus, the study was divided into two models namely, theoretical model and empirical model. Theoretical model is generally developed based on analysis of the literature in which forms the basis for collecting and analysing data. In case of this study, theoretical model included the following components such as Y, which stands for CMD, α_0 , for constant term of the model, β_i ; 2....4, stands for the coefficient of the predictors, ϵ_i , stands for the Error term for each observation and X_i 2 ---4, stand for the predictor as independent variables. Therefore,

Theoretical model is

$$Y = \alpha_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \epsilon_i \text{-----}$$

-----1

Where;

Y =Dependent variable

α_0 =Constant term of the model

β_i ; $i=1, 2, 3$ and 4 =Coefficient of predictors i

ε_i =Error Term for the each observation

X_i ; $i=1, 2, 3$ and 4 =Predictor (independent variable i)

Furthermore, the specification of the empirical model was guided by the empirical literature. In this study, the empirical model comprises the different variables in a question as determinants of capital market development in Tanzania. Therefore, the following variables were considered for the empirical model based on the availability of data from different sources.

Thus, the empirical model is

$$CMD = \alpha_0 + \beta_1 SML + \beta_2 INV + \beta_3 BSD + \beta_4 FDI + \varepsilon_i \text{-----} 2$$

Where;

CMD =; Capital Market Development

α_0 =Constant term of the model

ε_i =Error Term for the each observation

SML =Stock Market Liquidity

INV =Investment

BSD =Banking Sector Development

FDI =Foreign Direct Investment

β_1 =beta coefficient for stock market liquidity

β_1 = beta coefficient for investment

β_1 = beta coefficient for banking sector development

β_1 = beta coefficient for foreign direct investment

The model was tested by Pearson Correlation to evaluate the relationship between the variables. Then, Ordinary Least Square (OLS) regression technique was applied to estimate the relationship between CMD and its potential determinants as well as the overall significance of model using T-test and F-test respectively.

3.7 Definition of Variables and Measurement Procedures

A variable can be defined as the element which assists the researcher to collect relevant information on a particular study. Saunders *et al*(2012), define a variable as individual element or attribute upon which data have been collected. The proposed research variables were used to collect data and information about the determinants of capital market development in Tanzania. In this study, variables were categorized as independent and dependent variables. Independent variables which are relevant to Tanzania environment were grouped as macroeconomic factors, which comprise the variables namely as stock market liquidity, investment, banking sector development and foreign direct investment. The dependent variable in this study was the Capital Market Development. The above mentioned variables independent and dependent are similarly as defined by Cherif and Gazdar,(2010).

3.7.1 Capital Market Development

In this study, Capital market development is the dependent variable closely related to the learning and innovation capacity as it enables creative construction by

transferring resources to young and efficient companies. This is possible because a transparent market allows overcoming the obstacles of asymmetric information so that younger companies do not require their own corporate equity or special connections to obtain financing. Cherif and Gazdar, (2010) defined Capital market development as an integral part of financial development, which is, in turn, associated with economic growth. In other word capital market development is refereed as the performance of stock market which is based on the increase or reduction in stock prices or returns.

Capital market development is measured using the Number of Listed Companies, Market Capitalization (percentage of GDP), Value Traded (percent of GDP) and Turnover (percent). Those indicators were used by Khorshid.H.*et al* (2010). In this study, Capital market development was measured using market capitalization as a proportion of GDP since market capitalization is a good proxy and it has less arbitrary than any other index. Influential studies used market capitalization to proxy Capital market development (Yartey (2008), Cherif and Gazdar, (2010).

3.7.2 Stock Market Liquidity

Stock market liquidity is a crucial variable which influences the capital market development in Tanzania. Thus, liquidity is an influential factor for market participants when deciding which investment to take. Therefore, it is expected that, a more liquid stock market lead to higher capital market development. Aduda J.*et al* (2012) argues that the stock market liquidity measures the liquidity of the company's share which is the easy at which the firm's shares are bought and sold.

As the company's share prices reflect all the available information, the company's transaction costs will go down as a result the stock market liquidity is expected to have a significant impact on the capital market development. This variable was used in previous studies including those by Garcia and Liu, (1999), Billmeier and Massa, (2007), Yartey and Adjasi, (2007), Yartey (2008), Cherif and Gazdar, (2010), Ben Naceret *al* (2007) and Kemboi and Tarus, (2012)

Stock market liquidity is measured using value traded in percentage of GDP and turnover ratio in percentage. This is because when applying different measures they provide a clear picture of the relationship between stock market liquidity and Capital market development.

Mathematically it can be expressed as follows. Turnover ratio =

$$\text{Value traded} = \frac{\text{Total Value Traded}}{\text{Market Capitalization} \times \text{GDP}}$$

In this study, stock market liquidity was measured by value traded in percentage of GDP

3.7.3 Investment

Investment is one of the key variables, which influence the capital market development as the capital market represents one way to intermediate saving to investment projects. According to Mashika J.*et al* (2011), investment is an increase

in capital market in the economy and also enhances the operation of the capital market which eventually feeds into the growth of the economy.

Gross Capital Formation in percentage of GDP is used as a measure of investment.

The variable has been used in prior studies include, such as of, Billmeier and Massa (2007), Yartey (2008), Cherif and Gazdar, (2010), Khorshid H. et al (2010).

Mathematically it can be written as follows

$$\text{Investment rate} = \frac{\text{Gross national investment}}{\text{Gross national income}}$$

3.7.4 The Banking Sector Development

Banking sector development is defined as a process of improvements in the quantity, quality, and efficiency of banking services (Samadhan *et al* 2013)

Therefore, the banking sector development is a valuable component in the insight of the capital market development in Tanzania. The major players in the sector are Non-Financial Banking Institutions (NFBIs), Commercial banks, the retirement benefits institutions and the development finance institutions. While, both the banking sector and capital market channel are savings toward investment projects, they can be either components or substitutes. Yartey and Adjasi, (2007) explains that the banking sector development is the key factor for capital market development in Africa. These add that developing the financial intermediary sector can support capital market development. For instance, they assert this since many East Asian countries were successful and promoted services from the banking system therefore contribute significantly to the capital market development.

Therefore, liquid inter-bank markets, largely supported by an efficient banking system are vital for the capital market development. On the contrary a weak-banking system can constrain the capital market development.

The banking sector development can be measured by using two indicators namely; domestic credit to private sector and the ratio of broad money supply M3 to GDP. Since, domestic credit to private sector measures the role of banks in providing long-term financing to private company, while the ratio of broad money supply M3 to GDP measures the size of the banking sector in relation to the economy in general. Therefore, this study used the total value of domestic credit provided to the private sector in percentage of GDP to measure the banking sector development because private credit is the most comprehensive indicator of the activity of commercial bank. This indicator was used in numerous studies including those of Yartey 2008, Cherif and Gazdar, (2010) and Aduda J.*et al* (2012,

3.7.5 Foreign Direct Investment

Foreign direct investment (FDI) is an influential variable which is used to determine the capital market development. In the last few years, foreign investors were seen as major participants in capital markets. FDIs can have a positive impact on growth by engaging domestic capital accumulation. Thus, strong domestic investment performance is an indication of high returns to capital, which, in turn will attract more foreign capital. Errunza (1982) says that the long term impact of foreign capital inflows on the capital market development is broader than the benefits from initial flows and increased investor participation. Foreign direct investment is

measured by using private capital flows as percent of GDP. This indicator was also used by Yartey (2008) and Aduda J.*et al* (2012).

3.8 Data Processing and Analysis

Data Analysis refers to the process of evaluating data using analytical and logical reasoning to examine each component of a particular data. This form of analysis has been used by many of researchers when conducting their studies. In this study, quantitative data analysis (secondary data) was processed using SPSS (Statistical Package of the Social Scientist) because SPSS makes data analysis quicker because the program knows the location of the cases and variables. This tool is specifically made for analysing data and thus it offers great range of methods, graphs and charts.

Also it has extensive analytical capacity and it is more suitable for in depth data analysis. In the case of this study, tabulations were used to show the sample characteristics and Pearson's correlation and to show the relationship between determinants and Capital market development. Therefore, to complete the process the multiple regressions were under taken to show the effect of the independent variables and dependent variable.

3.8.1 Preliminary Data Analysis

The preliminary data analysis for this study was conducted. This was conducted through the correlation analysis among the independent variables and the descriptive statistical analysis.

3.8.1.1 The Correlation Analysis

In this study, Pearson correlation test was run-in order to evaluate either positive or negative relationship among the variables. Correlation matrix is the significant indicator that tests the linear relationship between the variables. Not only that also but it assists to determine the strength of the variables in the model. Mostly important the variable explains the relationship between Capital market development and its determinants. This is important and helps in deciding which variables to drop from the equation. The study used Stock Market Liquidity, Investment, Banking Sector Development and Foreign Direct Investment as the independent variables. To check for independence of the predictors, the non-multicollinearity assumption and a correlation test was run amongst the predictors. The correlation analysis was tested at 5% and 1% level of significant.

3.8.1.2 The Descriptive Statistical Analysis

Prior to determine the factors influencing the capital market development in Tanzania the initial analysis of descriptive statistics data were computed by using SPSS in order to check the validity of data .The interested statistical measures were minimum, maximum, mean, standard error mean and standard deviation.The variables involved in computation were Stock Market Liquidity, Investment, Banking Sector Development, foreign Direct Investment and capital market development.

3.8.2 Regression Analysis

In this study, the multiple regression model was run using Ordinary Least Square (OLS) regression technique. This method was invented by Carl Friedrich Gauss in 1795 and also can be believed as one of famous statistical techniques applied by most researchers in estimating the relationship between two variables. In this case, it was used to estimate the relationship between capital market development and its determinants such as stock market liquidity, investment, banking sector development and foreign direct investment. It also estimates the overall significance of model using T-test and F-test respectively.

Moreover, T-Test statistics was discovered by William Sealy Gosset in 1908. This is usually used to check whether or not each of the independent variables is significant in explaining the dependent variable which is Capital Market Development. In this study, the independent variables are stock market liquidity, investment, banking sector development and foreign direct investment. T-test statistic can be carried out by using SPSS and it can be obtained from the equation window and the P-value of each parameter can be taken from the output (Gujarati and Porter, 2009).

The null and alternative hypotheses for this test are as follows.

Null Hypothesis $H_0: \beta_1 = 0$

Alternative Hypothesis $H_1: \beta_1 \neq 0$

H_0 ; There is no significant relationship between the independent and dependent variables

H_1 ; There is a significant relationship between the independent and dependent variables

The decision rule states that null hypothesis will be rejected if P-value of T-test statistic is lower than the level of significance, α . Otherwise, do not reject it.

Likewise, F-Test statistic which was applied by George and Sir Ronald in 1920 is normally used to test the overall fitness of the model. Furthermore, F-Test can be conducted by using SPSS and the value can be obtained from the equation window and the P-value of the F-test statistic can be obtained from the output (Gujarati and Porter, 2009).

The null and alternative hypotheses for this test are stated as below

Null Hypothesis $H_0: \beta_1 = 0$

Alternative Hypothesis $H_1: \beta_1 \neq 0$

H_0 ; The overall model is insignificant

H_1 ; The overall model is significant

The decision rule states that null hypothesis will be rejected if P-value of F-test statistic is lower than the level of significance, α . Otherwise, do not reject it.

3.9 Summary

The main purpose of this chapter was to summarize the research methodology. This study adopted a quantitative research design because the study focuses on analysis of numerical data. The study employed secondary data obtained mostly through reviewed reports and were extracted direct from the various reports include data

bases of IMF and World Bank, National Bureau statistics report from (NBS), annually update report from DSE and Economic survey books from MOF. The time series data covered the period 1998 to 2012.

Moreover, theoretical and empirical model were formed and discussed. The study used regression model for data analysis. The model was tested by Pearson correlation and Ordinary Least Square (OLS) regression technique was adopted. Then, theoretical and empirical model were comprised different variables such as capital market development, stock market liquidity, investment, banking sector development and foreign direct investment. Lastly, this study was used SPSS for data processing because this tool makes data analysis quicker and more suitable for in depth data analysis. The next chapter explains the findings of the study and discussion on findings.

CHAPTER FOUR

4.0 FINDINGS OF THE STUDY AND DISCUSSION ON THE FINDINGS

4.1 Introduction

The aim of this chapter is to present the findings of the study and discuss the findings. The study findings presented into eight main sections: Section 4.1 provides the introduction whereas section 4.2 illustrates the results from preliminary analysis and section 4.3 provides the results from regression analysis. Section 4.4 describes on the link between the stock market liquidity and Capital market development while section 4.5 explains on the link between the investment and Capital market development. Section 4.6 provides on the relationship between the banking sector development and Capital market development and section 4.7 shows on the connection between the foreign direct investment and capital market development. Section 4.8 depicts the discussion on findings of the study and section 4.9 summarizes the chapter.

4.2 Results from Preliminary Analysis

The results from preliminary analysis are presented here under correlation analysis results and descriptive statistics results

4.2.1 Correlation Analysis Results

Person correlation test was run to evaluate the relationship among the variables. The variables that were used are as capital market development, stock market liquidity, investment, banking sector development and foreign direct investment. Table 4.1 demonstrates the correlation amongst the independent variables.

Table 4.1 : Correlation and the Independent Variables Correlations

		CMD	SML	INV	BSD	FDI
CMD	Pearson Correlation	1	.010	.588*	.745**	-.077
	Sig. (2-tailed)		.973	.021	.001	.785
	N	15	15	15	15	15
SML	Pearson Correlation	.010	1	-.213	-.104	.055
	Sig. (2-tailed)	.973		.446	.713	.844
	N	15	15	15	15	15
INV	Pearson Correlation	.588*	-.213	1	.949**	.228
	Sig. (2-tailed)	.021	.446		.000	.413
	N	15	15	15	15	15
BSD	Pearson Correlation	.745**	-.104	.949**	1	.070
	Sig. (2-tailed)	.001	.713	.000		.805
	N	15	15	15	15	15
FDI	Pearson Correlation	-.077	.055	.228	.070	1
	Sig. (2-tailed)	.785	.844	.413	.805	
	N	15	15	15	15	15

*. Correlation is significant at the 0.05 level (2-tailed).

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

Source: Research Data (2015).

Therefore, from Table 4.1 above, the Person correlation coefficient between capital market development and stock market liquidity, investment, banking sector

development and foreign direct investment is 0.010, 0.588, 0.754, and -0.077 respectively. Hence, the results show that there is a very strong, positive correlation between banking sector development and capital market development, since its Pearson correlation coefficient has a positive value of 0.745 with p-value of 0.001 which is significant at 5% level and the investment variable has a moderate relationship with the capital market development. This is because Pearson correlation coefficient has a positive value of 0.588 and the p-value of 0.021.

Moreover, the stock market liquidity has a Pearson correlation coefficient of 0.010 and p-value of 0.973. This implies that there is a weak relationship with the capital market development. However, Pearson correlation coefficient shows that there is no relationship between foreign direct investment and capital market development. This is due to negative Pearson correlation coefficient of value 0.077 and p-value of 0.785.

4.2.2 Descriptive Statistics Results

Table 4.2 below illustrates the descriptive statistics results for the capital market development as dependent variable and its determinants. The output contains information that is useful in understanding the descriptive qualities of the data. The number of the cases in the data set was recorded under the column labeled N was 15. The findings reveal that the average of capital market development is 4.8400. Also, the minimum and maximum observation of capital market development had the value of 1.90 and 6.90 respectively. The standard deviation measures the amount of variability in the distribution of the variable. Thus, the more that the

individual data points differ from each other, the larger the standard deviation will be. In this case, the standard deviation was 1.65564.

Furthermore, the results of stock market liquidity shows that this variable influence the capital market development with minimum and maximum observation of the value of 0.00 and 0.40 respectively. However, the mean value of stock market liquidity to influence the capital market development was 0.467 with standard deviation of 0.09904. Another variable was investment, it was found out that the results reported that the growth rate of investment to influence capital market development varies from 17 to 40 ranges and the average of investment to determine the capital market development was 25.4667 and standard deviation of 7.53910.

Likewise, the banking sector development results were reported to have a minimum and maximum value of 3.90 and 17.90 with an average of 10.8533 to influence the capital market development and the standard deviation of 5.26930. This implies that commercial banks credit provided to the private sector has been increasing steadily year to year as a result has contributed to capital market development.

Finally, the foreign direct investment result shows that the minimum and maximum ranges were 1.79 and 7.20 respectively and the mean of 3.7340 with standard deviation of 1.82445. This means that, with this range the foreign direct investment can have a positive impact on growth by engaging domestic capital accumulation and having a positive influence on current market value of the firm receiving flows as a result enhancing the capital market development.

Table 4.2 : Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Capital market development	15	1.90	6.90	4.8400	1.65564	-.593	.580
Stock market liquidity	15	.00	.40	.1467	.09904	1.378	.580
Investment	15	17.00	40.00	25.4667	7.53910	.470	.580
Banking sector development	15	3.90	17.90	10.8533	5.26930	-.028	.580
Foreign direct investment	15	1.79	7.20	3.7340	1.82445	.654	.580
Valid N (listwise)	15						

Source: Research Data (2015)

4.3 Results from Regression Analysis

4.3.1 The Overall Fitness of the Model

Table 4.3 below represents the regression results among the variables. The results show that the regression statistics adjusted R-square was 0.590. This means that 59.0 % of all four factors have explained the capital market development and about 41.0 % were explained by others which are not included in the study. Therefore, this tells that the goodness of fit of the regression equation.

Thus, this is a good indication that capital market development is determined by the stock market liquidity, investment, banking sector development and foreign direct investment. F-Test statistic which was implemented by George and Sir Ronald in 1920 is used to test the overall fitness of the model. Furthermore, the P-value of F-test statistic can be obtained from the output of the regression results. The null and alternative hypotheses for this test are stated as below.

Hypothesis: H_0 ; the overall model is insignificant and H_1 ; the overall model is significant and Level of Significance, $\alpha=0.05$.

Decision Rule:

- (i) Null hypothesis is not rejected when P-value of F-test is higher than the level of significance, α
- (ii) Null hypothesis will be rejected when P-value of Test is lower than the level of significance, α

Therefore, as per above criteria of hypothesis and the results from the below table, it can be concluded that since P-value of F-test is 0.010 which is lower than $\alpha=0.05$, the null hypothesis is rejected, and then the overall model is significant.

Table 4.3 : Summary of Regression Analysis Results
Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	FDI, SML, BSD, INV ^a		Enter

a. All requested variables entered.

b. Dependent variable: CMD

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.841 ^a	.707	.590	1.06003

a. Predictors: (Constant), FDI, SML, BSD, INV

ANOVA^b

Model	Sum of Squares	df	Mean Square	F	Sig
1 Regression	27.139	4	6.785	6.038	.010 ^a
Residual	11.237	10	1.124		
Total	38.376	14			

a. Predictors: (Constant), FDI, SML, BSD, INV

b. Dependent variable: CMD

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig
1 (Constant)	5.668	1.815		3.122	.011
SML	-1.519	3.251	-.091	-.467	.650
INV	-.324	.156	-1.477	-2.079	.064
BSD	.669	.213	2.128	3.137	.011
FDI	.106	.191	.117	.556	.590

a. Dependent variable: CMD

Note that, the significance levels are at 5% and 10%

Source: Research Data (2015).

Typically, values of R^2 below 0.2 are considered weak, between 0.2 and 0.4, moderate and above 0.4 strong. Therefore, based on the mentioned criteria the adjusted R-square R_{adj} in this study is 0.590, this means it is strong.

The estimated empirical equation is:

$$CMD = 5.668 - 1.519 SML - 0.324 INV + 0.669 BSD + 0.106 FDI.$$

Where: SML : Stock Market Liquidity

INV : Investment

BSD : Banking Sector Development

FDI : Foreign Direct Investment

CMD : Capital Market Development

The analysis of variance (ANOVA) shows that the model has predictive value since it is statistically significant of 0.010. Therefore, the null hypothesis of no predictive is rejected. The significant F-value, $F(4, 10) = 6.038$, $P < 0.05$. As indicated in Table 4.3 above the results show that the coefficients of banking sector development and foreign direct investment have a strong relationship with the capital market development. Since, it has the correct sign. This implies that the variables have contributed to the capital market development. However, regression analysis coefficient shows that there is no relationship between capital market development and stock market liquidity and investment. This implies that these variables have less contributed to the capital market development since the coefficients from regression equation are statistically insignificant.

4.4 Stock Market Liquidity and Capital Market Development

The aim of the first objective of the study was to examine the extent to which stock

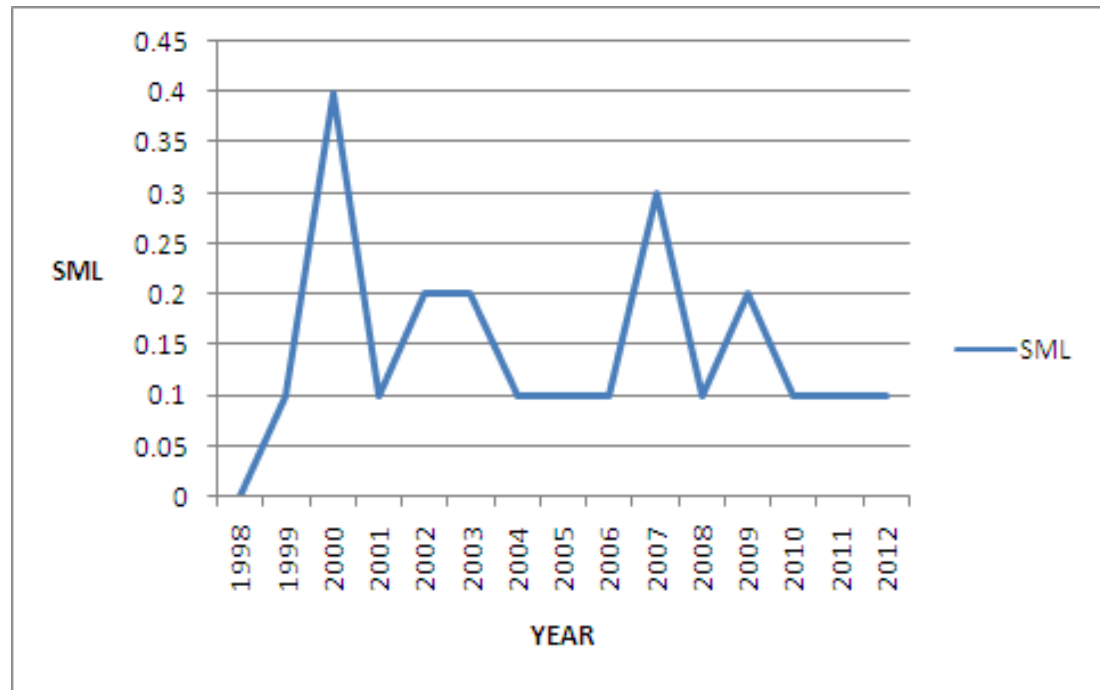
market liquidity influences the capital market development in Tanzania over the period of 1998-2012 as presented from Table 4.3 of the regression analysis results. It was hypothesized that there is a positive relationship between stock market liquidity and capital market development in Tanzania. But this hypothesis is opposite with the result from the above table which revealed that the stock market liquidity has negative coefficient value of 1.519, T-value of -0.467 and the P-value of 0.650. These values indicate that there is no strong evidence to support the alternative hypothesis of the first set of the hypotheses. Therefore, the null is accepted at both of 5% and 10% level of significant and then the variable is found statistically insignificant. Hence, the result further revealed that stock market liquidity has a negative relationship with the capital market development. This implies that a unit increase in the stock market liquidity will bring about a reduction of 1.519 in the capital market development.

This result indicates that the quicker and easier it is to buy or sell the share on the market, the more accurately the price reflects all available information but when firm's share prices reflect all the available information, the firm's transaction costs will go down and this is expected to have a positive impact on the capital market development but this negative sign on the result of stock market liquidity reflects lack of information sharing among the firm listed and low liquidity hinders the capital market development. Hence, this gives negative impact to capital market development in Tanzania.

4.4.1 Trends in Stock Market Liquidity

The study measures stock market liquidity using value shares traded as a percentage of GDP. It measures the liquidity of the company's share. Stock market liquidity is a vital variable which influences the capital market development. In other words, the more liquid stock markets could develop investment, profitability, and support allocation efficiency. Figure 4.1 below shows the trend of stock market liquidity, proxy by the value of share Traded/GDP.

Figure 4.1 : Trends of Stock Market Liquidity in Tanzania



Source: Research Data (2015).

Key: SML-Stock Market Liquidity

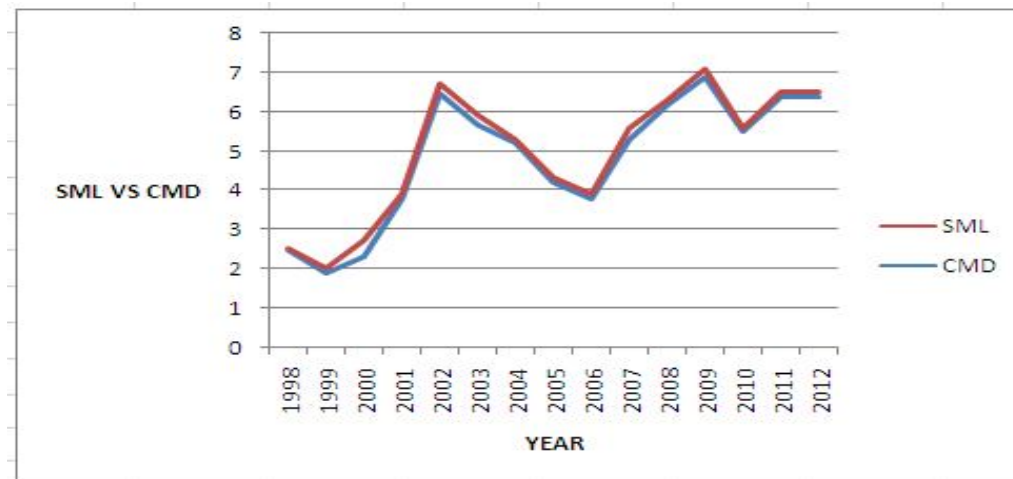
Therefore, liquidity is a significant factor for market participants when deciding which investment to take. Figure 4.1 above depicts that the liquidity of shares have increased upwards since 1998 up to 2000 with the value of 40%, then has been on downwards trend from 2000 up 2001 with the value of 10%. Moreover, the

situation gained in 2002 and then stabilized between 2002 and 2003 by 20%. The shares dropped by 10% in 2004 and then stayed constant in between 2004 and 2006. By the end of 2007, the liquidity of share increased up by 30%, and then shares declined in 2008 by 10%. This was mainly contributed by the global financial crisis. It showed an upward trend again in 2009 by 20%. Although the trend of stock market liquidity increased by 20% in 2009, the value soon fell by 10% in 2010. Since the year 2010, the trend of stock market liquidity has remained constant. Thus, as observed above, this reflects that there is a lack of information sharing among firm listed and therefore gives downbeat effect to capital market development in Tanzania.

4.4.2 Trends in Capital Market Development

As discussed above, the stock market liquidity is an important attribute of capital market development since theoretically more liquid stock markets improve the allocation of capital to their optimal use, influence investment in the short and long term and facilitate technological innovation. Therefore, Figure 4.2 below represents the trends of stock market liquidity and capital market development in Tanzania.

Figure 4.2 : Trends of Stock Market Liquidity and Capital Market Development in Tanzania.



Key: SML-Stock Market Liquidity and CMD-Capital Market Development
Source: Research Data (2015).

As indicated from the above figure, market capitalization and the value of shares traded displays quite different trends of fluctuations. In 1998 and 1999, the market capitalization and shares traded declined in the same trends. It is seen that the market capitalization has increased in 2000 and this indicates that the size of stock market was developing and also the value of shares traded increased.

This indicates that liquidity of Dar es Salaam stock exchange has to some extent increasing. Market capitalization of listed companies in percentage of GDP increased from 2.3% to 6.5% during the period from 2000 to 2002. Also, the value of shares traded in percentage of GDP declined from 0.4% to 0.2% during the period from 2000 to 2002. During 2002-2003 and 2003-2006, both market capitalization and the value of shares traded moved in the same downward trends.

After 2006 and 2007, market capitalizations of 3.8% increased to 5.3% and the liquidity of shares continued to rise from 0.1% to 0.3%. Both moved in upward direction; however the increasing rate was low such that in some years it was insignificant as shown in Figure 4.2 above. The figure indicates an upward trend again in 2008 up to 2009 by 6.2% it raised to 6.9%. Then the market capitalization declined in 2010 by 5.5%. Finally, in 2010 up to 2011 the market capitalization increased from 5.5% to 6.4% and then remained constantly in 2012 by 6.4% with respect to the value of share traded by 0.1%.

4.5 Investment and Capital Market Development

The aim of the second objective of the study was to examine the extent to which investment influences the capital market development in Tanzania over the period of 1998-2012. This was done by looking at the contribution of investment on Capital market development in Tanzania. It was hypothesized that there is a positive relationship between investment and capital market development in Tanzania. The second set of the hypotheses were tested with the investment variable. Therefore, the finding from Table 4.3 of the regression analysis result, reveal that investment has a negative coefficient value of 0.324, T-value of -2.079 and the P-value of 0.064 which is greater than significant level of 0.05 which means statistically is insignificant at this level and the null hypotheses is accepted and reject the alternative.

Moreover, the variable was tested at 0.10 level of significant and found statistically significant at this level, since the p-value is less than 10%. Therefore; there is no

evidence to support the null hypothesis. Hence, the alternative hypothesis is accepted at more than 90% level of significant. Therefore, there is a significant relationship between investment and capital market development. This means that, a 10% increases (or decrease) in investment decreases (or increases) capital market development by 32.4 %. This capital market development is moderately elastic to small changes in investment.

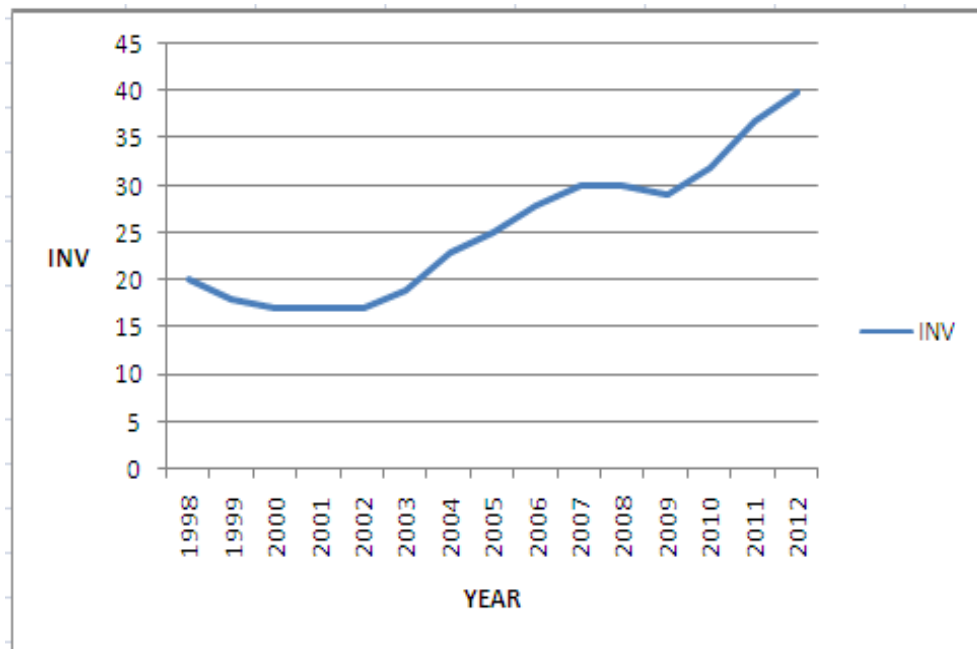
4.5.1 Trends in Investment

Investment is one of the crucial variables which stimulate the capital market development. Gross capital formation in percentage of GDP is used as measurement of investment and stock markets represent one way to intermediate saving to investment projects. On other hand, the larger savings boost higher amount of capital flows through stock markets. Investment remains the major catalyst to capital market development as well as to economic growth at large. Figure 4.3 below demonstrates the trends of investment in Tanzania and measured as gross capital formation in percentage of GDP

Furthermore, the available statistics as shown in the Figure 4.3 above indicate that the gross capital formation in percentage of GDP or investment grew from low to high trends. This is from the period of 1998 to 2012. For instance, the gross capital formation started with 20% in 1998. However, the value of GCF fell drastically to 18% in 1999 and further to 17% in 2002. Investment continued to rise at 19% to 23% in 2003 and 2004 respectively. In the same manner, the value of gross capital formation increased from 23% in 2004 to 30% in 2008 but declined to 29% in 2009.

Moreover, the value of investment resumed a rising trend, jumping to 32% and 37% in 2010 and 2011, respectively. The value of GCF reached its peak in 2012 standing at 40%.

Figure 4.3 : Trends of Investment in Tanzania



Source: Research Data (2015).

Key: INV-Investment

Figure 4.3 above reveal that the gross capital formation (GCF) or investment has been increasing gradually since 1998 up to 2012 and therefore has contributed to the capital market development in Tanzania. Through the financial intermediation, this is a process of pooling the savings from surplus economic agents to deficit economic agents; hence, the stock market is able to expand. Therefore, this is good indication that the government of Tanzania has continuously striving to improve the business environment to make Tanzania a good investment destination.

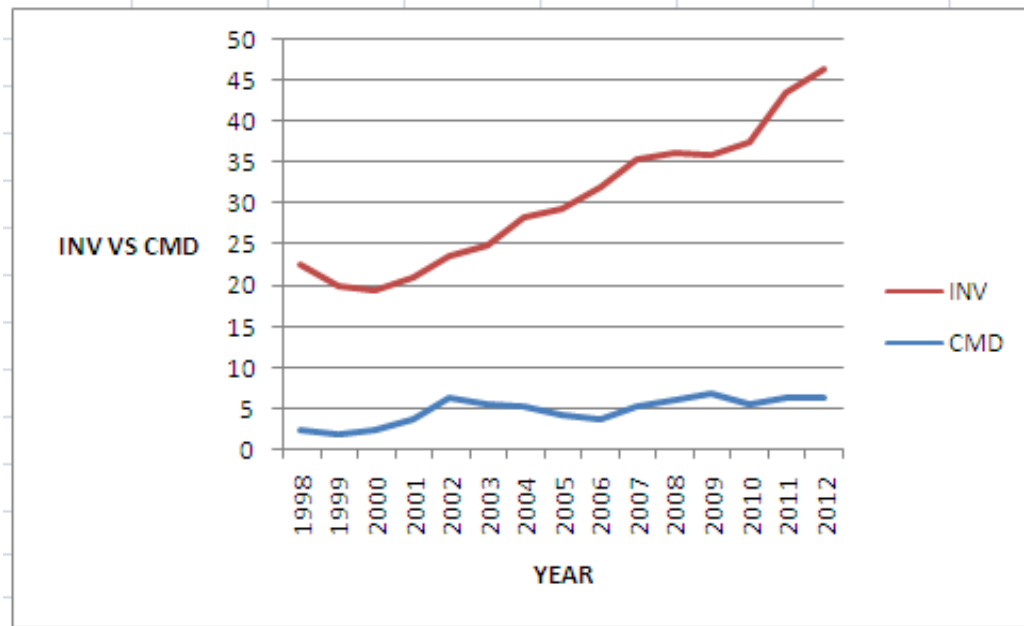
Additionally, the government of Tanzania has undertaken many economic reforms aimed at attracting investment including formulation of investment policy. The government enacted an Investment Act in 1997 which specifically aim at attracting investment. This led to the creation of the one stop centre for investors which promotes and facilitates investment. Therefore, Tanzania has many available investment opportunities such as Economic Development Zone (EDZ), Agro-processing industries and the manufacturing sector. Other opportunities are extractive (minerals), infrastructure, tourism, transportation, services, financial institutions and human resources.

4.5.2 Trends in Capital Market Development

The relationship between investment and capital market development has been widely important in any of country developments. Investment spending makes direct contribution to economic activity because investment is the most volatile component of capital market development. Investment plays vital role in the long run and short run growth. Figure 4.4 below represents the trend of investment and capital market development in Tanzania.

Investment is the most important macroeconomic variable that can influence the capital market development. It links the present with the future. Figure 4.4above depicts that there is a relationship between investment and capital market development. For instance, one percentage increase in investment will raise capital market development by a certain amount of percentage. This shows the importance of investment in the country.

Figure 4.4 : Trends of Investment and Capital Market Development in Tanzania



Source: Research Data (2015).

Key: INV-Investment and CMD-Capital Market Development

The trends of market capitalization of listed companies in percentage of GDP started in 1998 with 2.3% while investment started with 20% of the gross capital formation. However, both the trends of capital market development and investment declined from 2.5% to 2.3% during the period of 1998 to 2000 and fell down 20% up to 17% during the period 1998-2002 respectively. In the year 2002-2003, the trend of Tanzania's investments as a share of GDP increased from 17% to 19%, while the capital market development trends increased from 2.3% to 3.8% in 2000 and 2001, respectively. This trend in market capitalization of listed companies in percentage of GDP continue rising from 3.8% to 6.5%, during the period 2001-2002. However, the trend of capital market development displayed a declining

tendency till 2006 with 3.8% except 2007, 2008 and 2009 when the market capitalization increased by 5.3% 6.2% and 6.9% respectively.

Furthermore, the value of gross capital formation in investment increased from 19% in 2003 to 30% in 2008. The investment trend kept on the rise, except for the 2009 when it dropped by 29% and this was caused by the global financial crisis. During 2010-2011 and 2012 both investment and capital market development moved in upward direction. On other hand, investment promotes economic development through its direct and indirect impact on economic growth as it also affects other growth factors, such as unemployment rate as it also creates job opportunities.

4.6 Banking Sector Development and Capital Market Development

The third objective of the study intended to examine the extent to which the banking sector development influences the capital market development in Tanzania over the period of 1998-2012. It was hypothesized that there is a positive relationship between the banking sector development and capital market development in Tanzania. This hypothesis is in line with the findings from Table 4.3 which indicates that the banking sector development is another variable tested with positive coefficient value of 0.669, T-value of 3.137 and the P-value of 0.011. This variable was tested at 5% level of significant and found to be statistically significant, since the p-value is less than 5%. Therefore, the null hypothesis is rejected at this level of significant and the alternative hypothesis of the third set of the hypotheses is accepted. This implies that there is relationship between the banking sector development and capital market development. The implication of the

results is that when Banking Sector Development increase by one percentage point also the value of capital market development increases by 0.669 percentage points and when the banking sector development is zero, the initial value of capital market development is 5.668 units, since, the banking sector development was proxied by the total value of domestic credit provided by the commercial banking to the private sector relative to GDP. Thus, the rise in commercial banks credit provided to the private sector and people invest in stocks from savings in banking sector. This has led to the contribution in the capital market development in Tanzania.

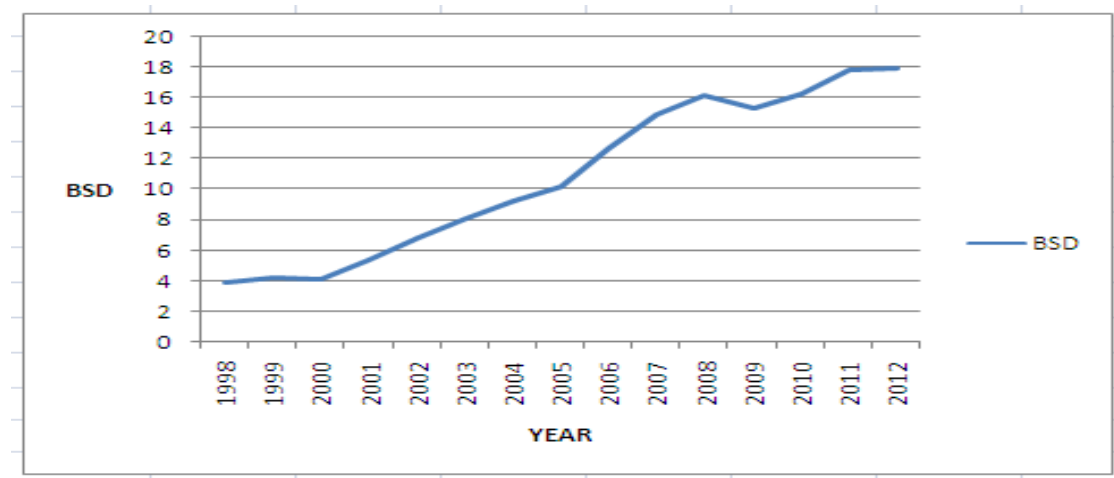
4.6.1 Trends in Banking Sector Development

Banking sector development can be explained as a process of improvements in the quantity, quality, and efficiency of banking services. This process involves the interaction of many activities. It is also an important variable in the economic development and more so in the capital market development because it affords investors with liquidity by advancing credit and facilitating savings. Banking sector development is commonly measured by broad money supply, claims on private sector, domestic credit provided by the banking sector, and domestic credit to the private sector. This study used the total value of domestic credit provided by the commercial banking system to the private sector relative to GDP. In order to facilitate better capital market development, a greater degree of banking sector development is desirable in this country and vice versa.

In Tanzania, as like many other developing countries, banks play a predominant role in the financial sector of the country as far as mobilization and allocation of

finance resources is concerned. Despite the financial crisis challenges which arose in 2008, the Tanzania banking sector remained safe and stable during 2009. In general, the sector is satisfactorily capitalised with paid up capital recording an increase of 39% (15% in 2008). Credit provided by the banking sector is accepted as the indicator of financial sector depth; therefore, measuring the role of banks in financing, an effective finance sector is expected to have a positive impact on capital market development. Furthermore, the establishment of a well-developed banking sector, such as well-functioning banks and other financial institutions can facilitate further investment and easier means of raising capital to support the activities of stocks and lead to better outcomes in the economy. On other hand, improvements in capital market development can support further the development of the banking system through increased organizational and operational efficiencies. Figure 4.5 below represents the trends of banking sector development proxy by the total value of domestic credit provided to the private sector in (% of GDP)

Figure 4.5 : Trends of Banking Sector Development in Tanzania



Source: Research Data (2015).

Key: BSD-Banking Sector Development

Trends of the banking sector development proxy by the total value of domestic credit provided to the private sector in percentage of GDP started in 1998 and reached the record of 3.9%, and then the following year, banks' credit to the private sector slightly increased up 4.2% and suddenly dropped by 4.1% in 2000. An upward trend has been witnessed since then, the share of the private sector credit to the banking system credit reached about 10.2% in the 2001/2005 period, which was twice the 5.4% level recorded in the last five years. The increase was mainly contributed by the measures directed to liberalizing the sector; address impediments to bank lending such as the restructuring of the state owned banks and non-bank financial institutions as well as the state owned utilities and amendments to the Land Act; strong economic expansion and increased number of credit worthy clients.

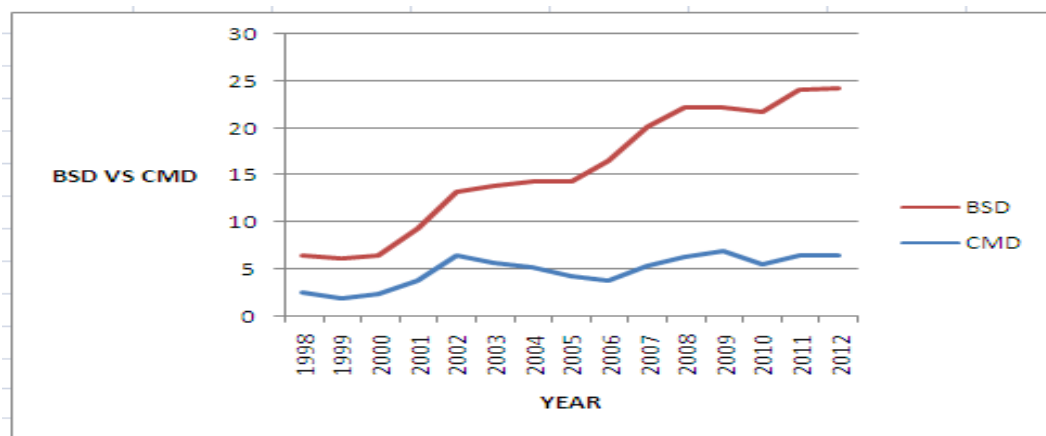
Moreover, Figure 4.5 above depicts that during the period 2005/2008 there was stable and continuously banking sector credits and a sharp increase can be noticed. The credit given by the banking sector was 10.2% and 16.1% respectively. This was largely driven by savings deposits. However, the banking sector development declined from about 16.1% in 2008 to around 15.3% in 2009. The down trend was mostly contributed by global financial crisis in 2008 and 2009. As the global financial crisis was becoming severe worldwide the effects started to be felt in the Tanzanian economy and the banking sector in Tanzania worried that trade in finance was increasingly becoming more risky as the country's export commodity prices continued to lose value in the world market and export order reduced. Furthermore, the banking sector development was increased from year 2010 up to

2012 by 16.2% and 17.9% respectively. Figure 4.5 above indicates that commercial banks credit provided to the private sector increased steadily from 1998 to 2012. Therefore, from the graphical representation above, it can be concluded that this variable has contributed to the capital market development in Tanzania.

4.6.2 Trends in Capital Market Development

Financial intermediary development in a country increases capital market development. This implies that increase in the share of capital in the banking sector and the increase in monetary aggregate positive effect on the capital market development. Capital market development is measured by using market capitalization as measure of size. This is the value of domestic equities traded on the stock exchange as a proportion of gross domestic product (GDP). Figure 4.6 below provides the trend of banking sector development and capital market development in Tanzania

Figure 4.6 : Trends of Banking Sector Development and Capital Market Development in Tanzania



Source: Research Data (2015).

Key: BSD-Banking Sector Development and CMD-Capital Market Development

Figure 4.6 above illustrates that the market capitalization and banking sector development for Tanzania varies across the years with the highest market capitalization being realized in 2009 at about 6.9% which can be attributed to the then government policies that encouraged investment and the reform in the banking sector which has high proportion of the market capitalization. The high growth of the market capitalization concurs also with an increase in the number of listed companies of which growing from 2 companies in 1998 to about 10 companies in 2009 and the lowest being about 1.9% in 1999 and the share of the private sector credit to the banking system credit reached about 17.9% in 2012 and 3.9% in 1998 respectively. And also the graph indicates that the market capitalization for Tanzania has declined from 6.5% in 2002 to about 3.8% in 2006.

Moreover, after 2006 up to 2009, market capitalizations of 3.8% increased to 6.9% and banking sector development has continued to rise from 12.7% in 2006 to 16.1% in 2008. Both moved in upward direction, and then the market capitalization declined in 2010 by 5.5% while the banking sector development increased by 16.2%. During 2008/2009, there was a fluctuation trends for both banking sector development and capital market development. This was mainly contributed by global financial crisis. However, again, both market capitalization and the banking sector development moved in same upward trends in 2011 and 2012 by 6.4% and 17.9% respectively. Therefore, it can be concluded that the banking sector development is very important in the contribution on the capital market development in Tanzania. Also both banking sector development and capital market

development are the two main forces that can bring high economic growth in the country.

4.7 Foreign Direct Investment and Capital Market Development

The fourth objective of the study examined the extent to which foreign direct investment influences the capital market development in Tanzania over the period of 1998-2012. It was hypothesized that there is a positive relationship between foreign direct investment and capital market development in Tanzania. This hypothesis confirms the positive result from Table 4.3 of the regression analysis; the foreign direct investment was tested with the fourth set of the hypotheses. Hence, the result from Table 4.3 revealed that the foreign direct investment variable has positive coefficient value of 0.106, T-value 0.556 and P-value of 0.590.

The variable was tested at 5% and 10% level of significant. However, it was found statistically insignificant in explaining capital market development, since the p-value is greater than 0.05 and 0.10. Therefore, the null hypothesis is accepted at both level of significant. In particular, the positive coefficient results have shown a positive link with capital market development. This implies that, a 1 percentage point increases in private capital flows increases capital market development by 0.106 percentage point. The implication of this is that emphasis on foreign direct investment is a way of stimulating growth in the developing country like Tanzania. Moreover, this shows that relationship between foreign direct investment and capital market development is complementary not substitute. This finding confirms that the foreign direct investment is one of the sources of capital market

development because it plays a big role in raising domestic savings in the country through job creation and enhancement of technology transfer. In doing so, the larger the domestic savings in the country results in higher amount of capital inflows through the stock markets or the higher rate of domestic savings in the economy accelerates the stock market activities.

4.7.1 Trends of Foreign direct investment

Foreign direct investment is an investment which gives foreign owners control over the behaviour of firms in which the investment is made. It is measured by using private capital flows as percentage of GDP. There is a strong relationship between the foreign direct investment and stock market. This can be shown by comparing their roles as foreign direct investment supports the capital market development, increases the economic development of a country and also stock market has a positive effect on economy and increases the opportunities of investment. Moreover, in increasing their share of foreign direct investment flows, most of the countries put easy restrictions on foreign direct investment; strengthen macro stability, privatization of state –owned enterprises, domestic financial reforms and tax incentives

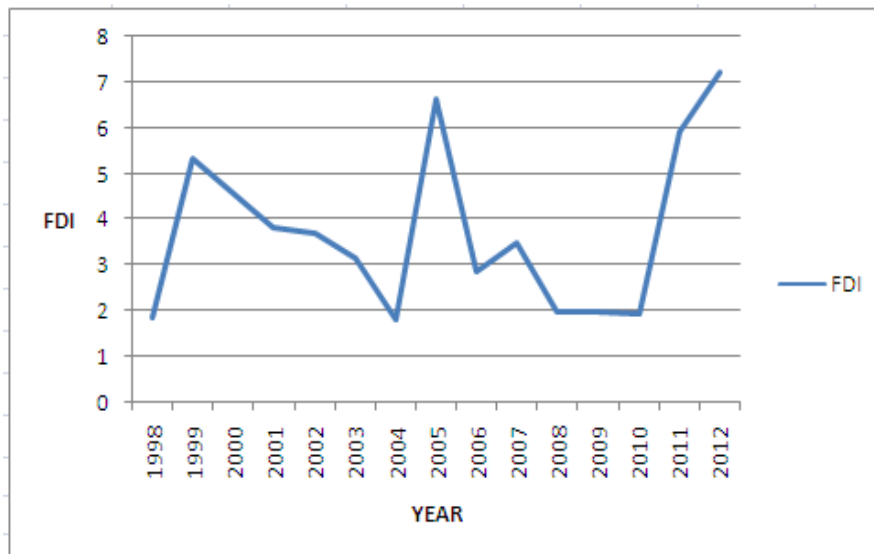
Likewise, foreign direct investment is an important source of capital market development. It can also play its role in raising domestic savings in the country through the creation of job and enhancement of technology transfer as well as managerial skills. Tanzania like many other countries across the globe has managed to build and maintain attractive and predictable investment climate through

numerous actions. One of the action is the; Tanzania investment Act 1997 which provides protection against nationalization access to credit from domestic sources and right for investor to transfer and profit having paid all the taxes required by law in Tanzania and tax incentives which provide exemption of import duty to capital goods including establishment facilities for investment by 90% and reduced VAT on projects capital goods including deemed capital goods to 10% assistance to obtain land for investment. The major institutional and legal framework carried by government since mid 1980's led to an increase inflow of foreign direct investment. Such increase has been evidenced by an increased number of registered projects and its ownership value of investment capital injected, employment and number of countries that has increased investment flow to Tanzania. Such positive results brought by foreign direct investment have also contributed to GDP growth and provided stable inflation rates since 1997 to 2011.

According to the world investment report 2013 by the United Nations Conference on Trade and Development (UNCTAD), the flow of foreign direct investment to Tanzania increased by 38.77% between 2011 and 2012 from USD 1229.4 million to USD 1706.0 million. This development was driven by primary sectors particularly oil and gas exploration, through foreign direct investment contributing more than 38% to Tanzania's GDP. However, the benefits from foreign direct investment may differ from one country to another and from time to time depending on the prevailing social, political, economical, technological situation, also legal and regulatory framework on the ground.

Furthermore, Figure 4.7 below demonstrates that foreign direct investment in Tanzania provided a cyclical movement in direction for some years but in recent time, the foreign direct investment inflows into Tanzania have been increasing over time. The growth was contributed by inter alia, the major and far-reaching reforms that Tanzania had been taking in the management of its economy mainly from the mid 1980s. The total foreign direct investment as percentage of GDP stood at 1.84% during 1998 and increased up to 1999 by 5.33% and followed by severe declining period from 5.33% to 1.79% in 2004 and when sharp growth could be observed and reached a record in 2005 by 6.63%. The trend was fluctuated during the period of 2007 up to 2010. This was mainly contributed by the global financial crisis and finally, during 2010/2012 the trend of foreign direct investment has remained positive by 7.2%. Figure 4.7 below represents foreign direct investment measured by using private capital flows as percentage of GDP.

Figure 4.7 : Trends of Foreign Direct Investment in Tanzania



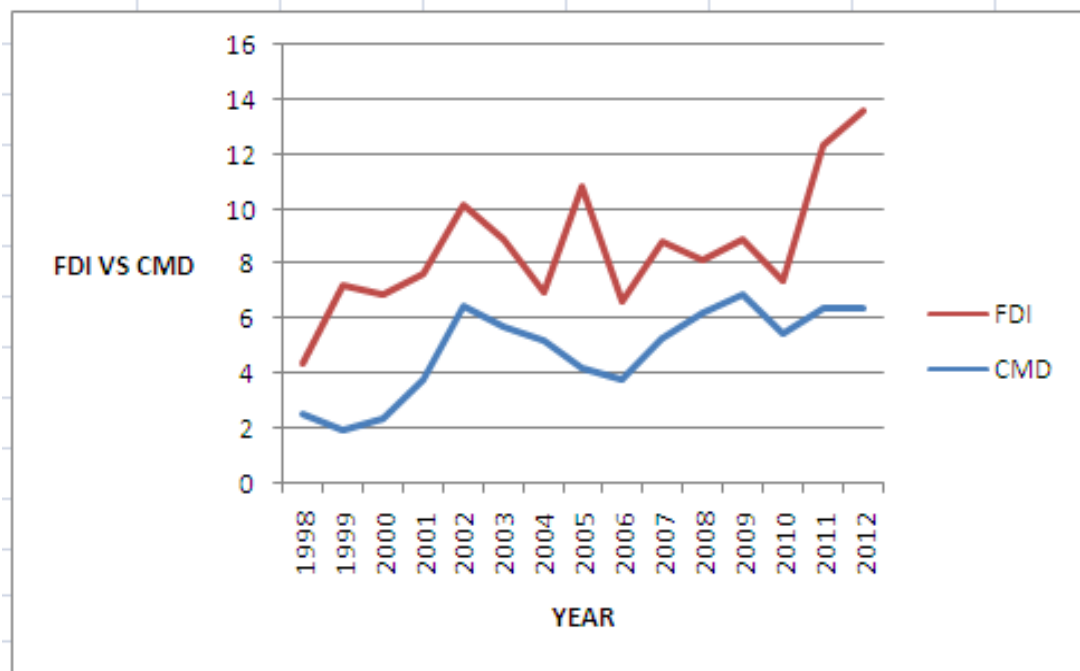
Source: Research Data (2015).

Key: FDI-Foreign Direct Investment

4.7.2 Trends of Capital Market Development

Capital market development is an increase in the market capitalization of the stock market. Market capitalization as a share of GDP is used as an indicator for capital market development. Foreign direct investments are becoming important source of finance in developing countries including Tanzania. The role of foreign direct investment in the capital market development of developing economics is considered very strong.

Figure 4.8 : below, provides the trend of foreign direct investment and capital market development in Tanzania



Source: Research Data (2015).

Key: FDI-Foreign Direct Investment and CMD-Capital Market Development

It is observed that there is triangular causal relationship between foreign direct investment and capital market development. This is to say that foreign direct investment stimulates economic growth; economic growth exerts positive impact on

capital market development. The implication is that foreign direct investment promotes capital market development. As per Figure 4.8 above, the trends of capital market development increased over time until 2010 and recorded 5.5% of market capitalization as share of GDP. This was largely attributed by the global financial crisis. The global financial crisis also affected the foreign direct investment by the decrease of 1.91% in 2010. During the period of 2010 up to 2011, the capital market development increased from 5.5% to 6.4% and then has remained constantly in 2012 by 6.4% with 17 listed companies. On the other hand, the foreign direct investment continued to rise from 2010 up to 2012 by 1.91% and 7.2% respectively.

This followed the listing of Barrick Gold Mining (BGM) now Acacia Mining PLC. The listing of Acacia mining changed the face of the DSE and attracted many foreign investors. The increase in the number of listings is also reflected in market capitalization which increased from TZS13.7 trillion to TZS 22.1 trillion in 2013. And also indices (both total and domestic) reflected the same levels of increment where the TSI index increased by about 190% and DSEI has increased by more than 60 percent. Trading turnover also increased significantly to more than TZS 350 in the past 15 months. Therefore, this is more than the past seven years trading turnover combined. Liquidity ratio is now at around 3% from levels of less than 1% during the same period.

Furthermore, foreign direct investment may affect capital market development in the way of having a positive influence on the current market value of the firms receiving flows not only that but also it strengthens capital structure, fosters

institutionalization and increases profitability. Additionally, the good trend for both foreign direct investment and capital market development are noticeable, i.e. increases when the economy goes well and declines when conditions are in a downturn. The next section elucidates the discussion on findings of the results.

4.8 Discussion of the Findings

This study determined the determinants of capital market development in Tanzania over the period of 1998-2012. Specifically the study examined the extent to which stock market liquidity, investment, banking sector development and foreign direct investment influences the capital market development in Tanzania. The study adopted quantitative approach and employed secondary data of fifteen years to model the determinants of capital market development in Tanzania. The macroeconomic factors data included are stock market liquidity, investment, banking sector development and foreign direct investment. The descriptive statistics for the dependent and independent variables were computed to check the validity of data. Pearson correlation test was used to evaluate the relationship between the variables and the regression analysis was run. The results from regression model revealed that investment, banking sector development and foreign direct investment have positive outcome on capital market development. However, the study found that the negative coefficients of stock market liquidity and does not explain the capital market development.

4.8.1 Stock Market Liquidity and Capital Market Development

In this study, stock market liquidity was found to have a negative and statistically insignificant impact on capital market development since the coefficient of stock market liquidity is -1.519. This implies that when the value traded to GDP ratio increases by one percentage, the market capitalization (capital market development) decreases or increase by 1.519 percentages. Thus, stock market liquidity has a negative impact on market capitalization. For example, in the study of Garcia and Liu, (1999) support this view that stock market liquidity may harm development since saving rates may be reduced due to externalities in capital accumulation. Furthermore, (Shleifer and Vishny, 1986) argue that very liquid stock market encourages investor myopia because they can sell their shares easily which weakens their commitment and incentive to monitor managerial actions. This result is contrary with earlier studies which support the view that stock market liquidity is the best predictor for the capital market development (Levine and servos, 1998; Yartey, 2008, Josephat and Tarus, 2012). In cementing of ideal of positive relationship between stock market liquidity and capital market development, Yartey (2008) argues that liquid markets affords investors access to their savings and thus boost their confidence in stock market investment. In addition, the more liquid the stock markets, the larger amount of savings that are channeled through the stock market, therefore, enhancing the capital market development.

4.8.2 Investment and Capital Market Development

Furthermore, the findings on investment have detected a negative role and link to play in generating gains in the capital market development in Tanzania since its

coefficient is negative insignificant of 0.324 from the empirical equation but statistically significant in explaining the capital market development. This means that, a 1 percentage increase (or decrease) in investment decreases (or increases) capital market development by 32.4 percentages. This capital market development is moderately elastic to small changes in investment. This result is consistent with the findings of Ben Naceuret *al* (2007), Cherif and Gazdar, (2010), John and Duke II,(2013) who obtain negative insignificant coefficients from empirical results that suggest an unfavorable impact of investment on capital market development. However, the result is contrary in the findings of Yartey (2008), Yartey (2010), Khorshid and Hoseini, (2010), who found a positive coefficient of investment variable. Also the findings of (Shahbazet *al* .2013) found a positive sign and reported that the increase in investment activities will raise stock market. Thus, this implies that the allocations of savings to investment foster the capital market development and eventually feeds into the growth of the country's economy

4.8.3 Banking Sector Development and Capital Market Development

The impact of banking sector development is found to be positive on capital market development in Tanzania due to its positive coefficients of 0.669 and highly statistically significant at 5% level This implies that the variable has contributed to the capital market development or in other way, the increase the value of banking sector development in considering the 1% point rise in bank credit to the private sector as a percentage of GDP increases the value of capital market development by 66.9 % point. This result proves the existence of financial intermediation which contributed to the real savings and thus more investment in stock market. Therefore,

this will show the way to capital market development as people invest in stocks from savings in the banking sector. Also, this indicates that the banking sector development boosts the capital market development directly through monitoring of managers and top management controls (Romano, 2002).

Moreover, this positive impact is in line with the findings of Demirgucc-Kunt and Levine, (1996a). They reported that the degree of capital market development across different countries is positively related to the banking sector development. Furthermore, additional findings show a positive and significant impact of banking sector development and capital market development. The findings are in consistent with the findings of Garcia and Liu (1999), Naceur and Ghazouani (2007), Yartey and Adjasi (2007), Yartey (2008), Nair (2008), Cherif and Gazdar, (2010), Kemboi and Tarus, (2012). Aduda *et al* (2012), El-Nader and Alraimony, (2013), Shahbaz *et al* (2013), John and Duke II, (2013). This result is contradicting with the view of Garcia (1986) who found that central banks may cause a negative correlation between bank growth and capital market development. In addition, Al-Mamun (2013) reported that banking sector development is negative statistically insignificant relationship in capital market development. He further argued that a very high level of banking sector development may have negative effects because stock markets and banks tend to substitute one another as financing sources.

4.8.4 Foreign Direct Investment and Capital Market Development

Finally, the foreign direct investment has a positive impact on capital market development in Tanzania since the coefficient is statistically significance of 0.106.

This implies that a 1% rise in private capital flows as percentage of GDP increases the capital market development by 0.106 percentage point. Therefore, this indicates that there is a strong domestic investment performance as a result of a high returns to capital, which in turn will attract more foreign capital to be invested in stock market. This result is in line with the findings of Errunza (1983) who found that foreign capital inflows have long term impact on capital market development and increase investor participation. Also Klingebiel and Schmukler, (2001), Yartey (2008), Adam and Tweneboah, (2009), Kalim and Shahbaz, (2009), Raza *et al* 2012 found a positive and statistically strong relationship between foreign direct investment and capital market development. However, the result is contrary to the study of Aduda *et al* (2012) who found that foreign direct investment has negative impact on capital market development.

4.9 Summary

This chapter presented analysed and discusses the findings of the study. The regression results show that the variables explained approximately 59.0 % variations in capital market development in Tanzania and about 41.0 % explained by others which are not included in the study. The value of the F-statistic shows that the equation has a good fit that is the variables are good explainer of changes in capital market development in Tanzania. The variables included in the study were stock market liquidity, investment, banking sector development and foreign direct investment and capital market development as dependent variable. The results further revealed that the coefficients of banking sector development and foreign direct investment have a strong relationship with the capital market development in

Tanzania. This is because they have the correct sign. This implies that the variables have contributed to the capital market development. However, the regression analysis coefficient illustrates that there is no relationship between stock market liquidity and capital market development since there is negative sign. This indicates that the variable has less contributed to the capital market development because the coefficients from regression equation are statistically insignificant. Similarly, the results show that investment has negative coefficient sign but statistically significant in explaining the capital market development in Tanzania.

Moreover, the study represented various figures which show the trends of stock market liquidity, investment, the banking sector development, foreign direct investment and capital market development in Tanzania. Finally, from the discussion of the findings of the results show that stock market liquidity has a negative impact on capital market development due to the negative coefficient and statistically insignificant. For instance, Garcia and Liu, (1999) support this view that stock market liquidity may hurt development since saving rates may be reduced due to externalities in capital accumulation and also Shleifer and Vishny, (1986) argue that very liquid stock market encourages investor myopia because they can sell their shares easily which weakens their commitment and incentive to monitor managerial actions. However, the result is contrary in the studies of Levine and servos, 1998; Yartey, 2008, Josephat and Tarus, (2012) their studies support the view that stock market liquidity is the best predictor for the capital market development.

Likewise, the findings on investment indicated negative coefficient but statistically significant in determining the capital market development in Tanzania. This result confirms the findings of Ben Naceuret *al* (2007), John and Duke II, (2013) who reported negative insignificant coefficients from empirical results. This suggests an unfavourable impact of investment on capital market development. However, the result is contrary to the findings of Yartey (2008), Khorshid and Hoseini, (2010), who found a positive coefficient of investment variable. Therefore, the increase in investment activities will raise stock market and also the allocations of savings to investment may foster the capital market development.

Moreover, the banking sector development is another variable which found to be positive on capital market development in Tanzania since its positive coefficient and statistically significant. This result verifies the existence of financial intermediation which contributed to the real savings and thus more investment in stock market and this will show the way to capital market development. This positive result is consistent with the findings of Demirgucc-Kunt and Levine, (1996a), Yartey (2008), Kemboi and Tarus, (2012). Aduda et al (2012), Shahbaz et al (2013), John and Duke II, (2013) they found positive and significant impact of the banking sector development and capital market development. However, this result is contradictory Garcia (1986) and Al-Mamun (2013) found a negative correlation between bank growth and capital market development.

On the other hand, the foreign direct investment has a positive impact on capital market development in Tanzania since the coefficient is statistically significance.

Foreign direct investment is an important source of capital market development and plays its role in raising domestic savings in the country through the creation of job and enhancement of technology transfer as a result will attract more foreign capital to be invested in stock market. This result confirm the findings of Klingebiel and Schmukler, (2001) and Errunza (1983) who found that foreign capital inflows have long term impact on capital market development. Conversely the result is opposite to the study of Aduda *et al* (2012) who found that foreign direct investment is negative impact on capital market development. The next chapter describes the conclusion and recommendations.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The main purpose of this chapter is to explain the conclusion and recommendations. After introductory part section 5.1, then section 5.2 describes the summary of the study and section 5.3 provides the implications and recommendations. Furthermore, section 5.4 explains the limitations of the study while section 5.5 illustrates the suggested areas for further research.

5.2 Summary of the study

The broad objective of this study was to determine the determinants of capital market development in Tanzania using time series data for the period of 1998-2012. Specifically the study examined the extent to which stock market liquidity, investment, banking sector development and foreign direct investment influences the capital market development in Tanzania.

This study adopted a quantitative approach research design and deduction approach. The study employed secondary data of fifteen years (1998-2012) as times series data. The data that were collected are market capitalization, value traded, gross capital formation, domestic credit provided to the private sector and private capital flows. Also, the sources of these data used were from Dar es Salaam stock exchange (DSE), Capital Markets and Securities Authorities (CMSA), Ministry of Finance (MOF), International Monetary Fund (IMF), World Bank and National Bureau of Statistics (NBS). Moreover, the data were collected mainly through

reviewed reports and were extracted direct from the various reports included Economic survey books from (MOF), Economic and operation report from (BOT), National statistics report from (NBS), Quarterly update report from (DSE) and databases of IMF and World Bank websites.

This study was used regression model for data analysis, Pearson correlation test was used to evaluate the relationship between the variables. On other hand, the study used multiple regression analysis by applying ordinary least square (OLS). The macroeconomic variables data involved were stock market liquidity, investment, banking sector development and foreign direct investment. The regression results found to have no relationship between stock market liquidity and capital market development since, the coefficient of stock market liquidity is negative. This implies that there is a small amount of savings that are channeled through stock market as a result decline the capital market development,

Additionally, the study found out that there is small size and less liquidity market. This may be contributed with poor understanding of issues on the part of the public discourages potential investors from participation in stock markets which means decreases the capital market development. This result is consistent with findings of (Shleifer and Vishny, 1986) who found that the stock market liquidity has a negative impact on capital market development, this indicate that there is a few local participation, both at individual and company level. However, this result is opposite in the studies of Yartey, 2008, Josephatand Tarus, (2012) their studies

support the view that stock market liquidity is the good predictor for the capital market development.

However, the regression results indicated a positive statistically strong relationship between investment and capital market development. This indicates that the allocations of savings to investment foster the capital market development and eventually feeds into the growth of the country economy. This finding aligns with the works by Garcia and Liu (1999), Yartey (2010), Khorshid and Hoseini, (2010). While, other studies, Ben Naceur *etal* (2007), John and Duke II, (2013) have reported negative impact of investment on capital market development. prove

Also, the banking sector development is another factor found to have a positive and statistically significant effect on capital market development in Tanzania. This implies that the percentage point rise in bank credit to the private sector as a percentage of GDP increases the value of capital market development. It is believed that a well developed banking system provides funds to investors to invest in the capital market. In addition, the developing banking sector is able to encourage capital market development and this demonstrated by the experiences of many East Asian countries. Therefore, this result demonstrates the existence of financial intermediation which contributed to the real savings and thus more investment in stock market. Garcia and Liu, (1999), Naceur and Ghazouani, (2007), Yartey (2008), Cherif and Gazdar, (2010), Kemboi and Tarus, (2012), John and Duke II, (2013) found the similar findings. On other hand, this result is different with the

view by Garcia (1986) and Al-Mamun (2013) who reported that the banking sector development has negative impact on capital market development.

Lastly, foreign direct investment has reported a positive effect on capital market development due to its positive coefficient is statistically significance. This implies that there is a strong domestic investment performance as a result of a high returns to capital, which in turn will attract more foreign capital to be invested in stock market. This result corroborates with the findings of Kalim and Shahbaz (2009), and Errunza (1983). According to Aduda *et al* (2012), this result is contrary and found that the foreign direct investment is negative impact on capital market development. The next section focuses on implications and recommendations.

5.3 Implications and Recommendations

5.3.1 Policy Implications

In the perspective of policy implication based on the findings, the study suggests that the government should regulate and control financial sector in particular stock markets to optimal fruits of capital market development. This will guarantee that there are more players on the stock exchange and therefore increases competition and quality of securities investments resulting in a significance influence on capital market development. Tanzania's Policy makers, especially Dar es Salaam Stock Exchange (DSE) and Capital Market and Securities Authorities (CMSA) should cutoff restriction for the foreigner investor for listed companies and plan strategies to increase the foreign direct investment and offer incentives for long investing and listing on stock market. This will attract major investors to the other sectors of the

economy to bring the required development in the capital market. From the findings of the study, the results reported that the investment variable plays an important role in determining capital market development and thus, Tanzania has to encourage savings and investment by appropriate policies through encouraging competition and improving the institutional framework.

Also, the findings revealed that banking sector development plays a positive role in capital market development, represented by the total value of domestic credit provided to the private sector in percentage of GDP. Hence, the government of Tanzania needs to set policies that retain reasonable interest rates in order to increase the demand for credit to the private sector, and then influence the capital market development.

5.3.2 Practical Implications

This study has some practical implications in Tanzania. In order to encourage capital market development in the country, it is very crucial to encourage savings by appropriate incentives through creation of jobs, enhancement of technology transfer and tax incentives of which have significantly increased private saving. This has also been the primary way that the Tanzanian policy makers have sought to stimulate household saving, to improve stock market liquidity by encouraging local participation, both at individual and company level.

Furthermore, the government of Tanzania must also provide incentives to local and foreigners such as corporate tax which is reduced from 30 to 25%, zero capital gain,

zero stamp duty, withholding tax of 5% on dividend income and zero withholding tax on interest income. In addition, liquidity on stock markets also increases investor incentive to acquire information on firms. Therefore, all these incentives should be provided to foreigners for investment as foreign direct investment which will improve stock market capitalization which at the end will not only promote economic activity but also develops capital markets. For instance, China offers foreign-invested firms a tax refund of 40% on profits that are reinvested to increase the capital of the firm or launch another firm. India, similarly, it offers a tax exemption on profits of firms engaged in tourism or travel, provided their earnings are received in convertible foreign currency.

Moreover, to develop the banking sector can bring a boost in investment through gross fixed capital formation as demonstrated by the experiences of many East Asian countries. Also to support services from the banking system contribute significantly to the capital market development. Moreover, domestic investment is an important determinant of capital market development, therefore, to promote capital market development in the country can encourage investment by appropriate policies that make a friendly business environment and where investors feel relaxed with legal and financial framework of the country. The findings suggest a positive impact of some macroeconomic variables on the capital market development in Tanzania. Among these are investment, banking sector development and foreign direct investment. For that case, if the government of Tanzania seriously targets these macroeconomic variables, the capital market development will boost at high level.

5.3.3 Recommendations

It is recommended that government should provide more efforts in the infrastructures especially, electricity, telecommunication and roads, across the regions so as to enhance the competitiveness of the environment in order to retain more investors. In addition, there is a need to have a strategic and comprehensive promotion and facilitation of investment that need to achieve the interest of Tanzania. Saving behaviour must be encouraged in the country through appropriate saving policy from the government. Because when there is a foreign investment in the country then more employments are available for people as a result people can have more extra money for savings. Also that foreign direct investment provides managerial skills as well as transfer of technology.

Furthermore, it is recommend that the government of Tanzania should address constraints affecting domestic saving such as inflation rates, rate of interest, tax rates and use policies to continue banking sector development. Also, the private sector should be encouraged to invest in capital market. Hence, this can be done through educating and enlightening the public using knowledgeable people and experts or professionals that are competent in stock market dealings. Also, small and medium companies should be encouraged to participate in the stock market, as they play an important role in the Tanzania economy.

5.4 Limitations of the study

The study focused only on the quantitative approach and dealt with macroeconomic factors in relation to capital market development in Tanzania such as stock market

liquidity, investment, the banking sector development and foreign direct investment. The study further did not cover qualitative approach namely institutional and behavioural factors. Thus, the use of qualitative data could provide more insights to the solutions on the current challenges facing capital market development in Tanzania. The study did not cover other factors like income level, savings, exchange rate, interest rates, money supply and consumer price index. Therefore, these factors could have an impact to the capital market development in Tanzania.

5.5 Suggested Areas for Further Research

Further studies should be conducted in the macroeconomic factors such as income level, savings, exchange rate, interest rates, money supply, and consumer price index. Also, there is still a need for further studies to be done using qualitative data application in relation to the capital market development in Tanzania.

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APPENDICES

APPENDIX I

The Data used for Estimation (1998-2012)

Year	CMD	SML	INV	BSD	FDI
1998	2.5	0	20	3.9	1.84
1999	1.9	0.1	18	4.2	5.33
2000	2.3	0.4	17	4.1	4.55
2001	3.8	0.1	17	5.4	3.82
2002	6.5	0.2	17	6.8	3.69
2003	5.7	0.2	19	8.1	3.15
2004	5.2	0.1	23	9.2	1.79
2005	4.2	0.1	25	10.2	6.63
2006	3.8	0.1	28	12.7	2.83
2007	5.3	0.3	30	14.9	3.47
2008	6.2	0.1	30	16.1	1.95
2009	6.9	0.2	29	15.3	1.95
2010	5.5	0.1	32	16.2	1.91
2011	6.4	0.1	37	17.8	5.9
2012	6.4	0.1	40	17.9	7.2

Source; IMF, World Bank indicators (2012)

Where by

CMD=Capital Market Development

Measured by Market Capitalization of listed companies (% of GDP)

SML=Stock Market Liquidity

Measured by Value traded (% of GDP)

INV=Investment

Measured by Gross capital formation (% of GDP)

BSD=Banking Sector Development

Measured by Domestic credit provided to private sector (% of GDP)

FDI=Foreign Direct Investment Measured by Private capital flows (% of GDP)

APPENDIX II

Table .Listed Companies in DSE as December 2012

Listed Companies

DOMESTIC LISTED COMPANIES

Company	ISIN	Date Listed	Number of Listed Shares
TOL Gases Ltd. (TOL)	TZ1996100008	15th April, 1998	37,223,686
Tanzania Breweries Ltd.(TBL)	TZ1996100016	9th September, 1998	294,928,463
Tatepa Company Ltd.(TATEPA)	TZ1996100065	17thDecember,1999	17,857,165

Company	ISIN	Date Listed	Number of Listed Shares
Tanzania Cigarette Company.(TCC)	TZ1996100032	16thNovember,2000	100,000,000
Tanga Cement Public Ltd Co.(SIMBA)	TZ1996100057	26thSeptember,2002	63,671,045
Swissport Tanzania Ltd. (SWISSPORT)	TZ1996100040	26thSeptember,2006	36,000,000
Tanzania Portland Cement Co. Ltd. (TWIGA)	TZ1996100024	29thSeptember,2006	179,923,100
DCB Commercial Bank (DCB)	TZ1996100214	16thSeptember,2008	67,827,897
National Microfinance Bank (NMB)	TZ1996100222	6thNovember 2008	500,000,000
CRDB Bank(CRDB)	TZ1996100305	17thJune 2009	2,176,532,160
Precision Air Services Plc(PAL)	TZ1996101048	21stDecember 2011	193,856,750
Maendeleo Bank Plc (Maendeleo)	TZ1996101683	4thNovember 2013	9,066,701
Swala Gas and Oil	TZ1996101865	11 th August 2014	99,954,467
Mkombozi Commercial Bank	TZ1996101972	29th December2014	20,615,272

CROSS-LISTED COMPANIES

COMPANY	ISIN	Date listed	Number of Issued Shares
Kenya Airways Ltd. (KA)	KE0000000307	1 st October 2004	461,615,484
East African Breweries Ltd (EABL)	KE0000000216	29 th June 2005	658,978,630
Jubilee Holdings Ltd (JHL)	KE0000000273	20 th December 2006	36,000,000
Kenya Commercial Bank (KCB)	KE0000000315	17 th December 2008	2,217,777,777
National Media Group (NMG)	KE0000000380	21 st February 2011	157,118,572
Acacia Mining PLC	GB00B61D2N63	7 th December 2011	410,085,499
Uchumi Supermarket Ltd	KE0000000489	15 th August 2014	265,426,614