

**CONTRIBUTION OF PENSION FUNDS IN THE DEVELOPMENT OF  
CAPITAL MARKETS INTANZANIA**

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THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS  
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**2014**

**CERTIFICATION**

The undersigned certifies that he has read and now recommends for acceptance, by the Open University of Tanzania, the dissertation entitled “*Contribution of pension funds in the development of capital markets in Tanzania*”

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Date: .....

**DECLARATION**

I, **Benitho William Kyando**, do hereby declare that this dissertation is my own original work and that it has not been submitted for a similar degree award in any other university.

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## **DEDICATION**

This work is dedicated to my father William Yoram Kyando and mother Rahel Sigalla who laid a strong foundation for me to climb the ladder of education.

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**ABSTRACT**

The involvement of pension funds in capital market transactions in Tanzania is increasing in tandem with their growing financial power. A strong presence of pension funds (PFs) seems to be a precondition for the development of liquid securities markets with. Thus, the major objective of the study was to assess contribution of PFs to the development of capital market in Tanzania, Dar es Salaam stock exchange (DSE) being the centre of focus. Data was collected from PFs, the DSE, stock brokers and investment advisors. Data collected was analysed using the spreadsheet computer software to establish evidence on the contribution of PFs to the development of DSE in terms of turnover, liquidity and portfolio ratio.

The results show that there is low participation of PFs in IPOs. PFs hold a small fraction of DSE's market capitalization. PFs purchases and holds securities for longer terms. The low liquidity of the DSE is partially contributed by low participation of PFs in secondary market trading. Finally, the results show that portfolio of PFs is mainly made up by Government bonds, bank deposits and loans. Inclusive, results from the research work imply that the contribution of PFs in the development of capital markets in Tanzania, particularly the DSE is not significant. The researcher recommends that for significant contribution of PFs towards future development of capital markets in Tanzania, there should be professional fund managers, variety of products in the market (more listed companies from different sectors of economy) and adoption of the enforcement of the Social Security Regulatory Authority investment guidelines.

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**LIST OF ABBREVIATIONS**

ABG	African Barrick Gold PLC
ADR	Authorised Dealer Representative
ASEA	African Securities Exchanges Association
ASI	All Share Index
ATS	Automated Trading System
BI	Banks and Insurance/Investments Index
CMSA	Capital Market and Securities Authority
CRDB	CRDB Bank Public Limited Company
CS	Commercial Services Index
DCB	DCB Commercial Bank Plc
DPI	Directorate of Planning and Investments
DSE	Dar es Salaam Stock Exchange
DSEI	Dar es Salaam Stock Exchange Index
EABL	East African Breweries Limited
EASEA	East African Securities Exchanges Association
EGM	Enterprise Growth Market
FSI	Foreign Share Index
GDP	Gross Domestic Product
IA	Industrial and Allied Index
IPO	Initial Public Offer
JHL	Jubilee Holdings Limited
KA	Kenya Airways Limited
KCB	Kenya Commercial Bank

LDM	Licensed Dealing Members
LSE	London Stock Exchange
MIMS	Main Investment Market Segment
NHIF	National Health Insurance Fund
NICO	National Investment Company Limited
NMB	National Microfinance Bank Plc
NMG	Nation Media Group
PAL	Precision Air Services Limited
SIMBA	Tanga Cement Company Limited
SMEs	Small and Medium Enterprises
SRO	Self-Regulatory Organization
SSRA	Social Securities Regulatory Authority
SWISSPORT	SWISSPORT Tanzania Plc
TATEPA	Tanzania Tea Packers Limited
TBL	Tanzania Breweries Limited
TCC	Tanzania Cigarette Company Limited
TOL	TOL Gases Limited
TSI	Tanzania Share Index
TWIGA	Tanzania Portland Cement Company Limited

## **CHAPTER ONE**

### **1.0 INTRODUCTION**

#### **1.1 Background to the Study**

A capital market is a market for securities - debt or equity, where companies and governments can raise long term-term funds. It is defined as a market in which money is provided for periods longer than a year (Sheffrin, 2003). The well-functioning of country's capital market is a dominant condition for economic development.

Stock markets are essential because they allow competition between various instruments of a bank-based financial system and the non-bank financial intermediaries. In addition, capital markets allow risk sharing on an individual basis, without the need for a government guarantee. Furthermore, capital market offer instruments which do not suffer from a cash-flow disparity; and facilitate the development of other financial markets such as derivative markets.

By allowing competition between various instruments, stock markets are well positioned to satisfy each investor's risk, return on investment and horizon preferences (maturity matching) (Catalán, 2004). In most of Africa's bank-based financial system, the choices for lenders (savers) and borrowers are very constrained. Investment is often constrained to safe but low, and sometimes negative rates of return in tightly regulated financial markets or to the higher, riskier rates of return in the unregulated markets. On the other hand borrowers are restricted to the high rates of interest charged by banks or are constrained by the amount of credit available on

the high-risk unregulated financial markets. In stock markets there are no stipulated ceilings on return on investments. As a consequence they offer an alternative to safe but low, sometimes negative rates of return. In developing countries, they provide investors with a greater range of risk and return opportunities than a bank-based financial market (Naceur, et al, 2007).

They also allow for a better matching of the risk and return features of lender and borrowers. Stock markets allow risk sharing, without the need of government guarantees. Most bank loans in African countries require government guarantees. In contrast equity market returns are not guaranteed by the government. Expected returns are driven by the performance and prospects of the company itself, and not by government guarantees.

Institutional investors have become increasingly important for both asset management and the development of capital markets in any economy. In fact, institutional investors are likely among the most important conduits of private and public savings, supplying capital for firms and countries to grow. Among institutional investors, pension funds have played a crucial role across countries (Davis, 2005).

Pension funds face the regulatory requirement to allocate a large fraction of their capital domestically and given the large size of their capital, they are expected to invest in a broad range of domestic assets and diversify risk as much as possible within the country. Therefore relative to other institutional investors, pension funds are thought to be the ones which contribute the most to the development of domestic capital markets (Raddatz and Schmukler, 2008).



## **1.2 Emergence of Capital Market and Establishment of DSE in Tanzania**

The development of capital markets has been considered an important aspect in the achievement of the economic recovery programme. The emergence of capital market in Tanzania had to undergo various stages before it stood as it is now. The first stage in developing capital market was the establishment of Capital Markets and Securities Act of 1994 to supervise, regulate and develop capital markets and securities businesses in Tanzania. It commenced its operations as a unit under the Bank of Tanzania on 8<sup>th</sup> April 1994. The Act makes provision with respect to stock exchanges, stock brokers and other persons dealing in securities. The Act provides a framework for the regulation of Securities business in the country. The case for regulations is needed to protect investors and market integrity by ensuring liquidity, capital adequacy as well as good behaviour by market participants.

The second stage was to establish Dar es Salaam Stock Exchange (DSE) as the secondary market in Tanzania. DSE was incorporated in September 1996 as a company limited by guarantee without a share capital. The DSE is a non-profit making body created to facilitate the Government of Tanzania implementation of the financial reforms and in the future to encourage wider share ownership of privatized and all the companies in Tanzania (DSE handbook, 2008). The exchange did not operate until April 1998 with the listing of the first company. Table 1.1 shows a sequence of local companies listed at the DSE. National Investment Company Limited (NICOL) was delisted from the DSE effectively from 6<sup>th</sup> July 2011. This was a directive issued by Governing Council of DSE on 31<sup>st</sup> May 2011 due to the failure of NICOL to comply with the DSE's continuing listing obligations. Maendeleo Bank Public Limited Company became the first company to be listed on

the Enterprise Growth Market Segment (EGM) of the DSE. Table 1.2 shows a sequence of foreign companies cross listed at the DSE.

**Table 1.1 List of Local Listed Companies at DSE**

<b>Sn</b>	<b>Company Name</b>	<b>Date Listed</b>	<b>Issued Shares</b>	<b>Offer Price</b>	<b>1<sup>st</sup> Day Closing Price</b>
1	TOL	15-04-1998	37,223,686	500	510
2	TBL	09-09-1998	294,928,463	550	630
3	TATEPA	17-12-1999	17,857,165	330	380
4	TCC	16-11-2000	100,000,000	410	500
5	SIMBA	26-09-2002	63,671,045	300	520
6	SWISSPORT	03-06-2003	36,000,000	225	630
7	TWIGA	29-09-2006	179,923,100	435	700
8	NICOL	15-07-2008	69,178,134	300	400
9	DCB	16-09-2008	32,393,236	275	350
10	NMB	06-11-2008	500,000,000	600	1,020
11	CRDB	17-06-2009	2,176,532,160	150	200
12	PAL	21-12-2011	193,856,750	475	500
13	MBP	05-11-2013	9,066,701	500	600

Source: DSE Handbook, 2014

**Table 1.2 List of Foreign Companies Cross Listed at DSE**

<b>Sn</b>	<b>Company Name</b>	<b>Listed Date</b>	<b>Cross Listed Shares</b>	<b>1<sup>st</sup> Day Closing Price</b>
1	KA	01-10-2004	461,615,484	N/A
2	EABL	29-06-2005	658,978,630	2,300
3	JHL	20-12-2006	36,000,000	5,860
4	KCB	17-12-2008	2,950,169,143	440
5	NMG	21-02-2011	157,118,572	N/A
6	ABG	07-12-2011	410,085,499	N/A

Source: DSE Handbook, 2011

N/A –The cross listed security did not trade in the first day of its listing at DSE.

According to DSE's Executive Report of 25 July 2012, more than 180,000 Tanzanians own shares in various companies Listed at DSE. Furthermore, according to CMSA, Foreign Investors Regulation 2003, foreign participation is capped at 60% of the listed companies with a balance of 40% reserved for Tanzanian nationals.

### **1.2.1 Trading at the DSE**

From April 1998 to November 2006 trading was conducted at the DSE Trading Floor under a continuous open outcry auction trading system. This trading system is whereby representatives of the Licensed Dealing Members (LDMs) converge at the trading floor and trade by shouting their orders to the board writers who records the orders on the board. The trading is commenced and ended by the ring of a bell.

From December 2006 up to now the DSE trading system changed to Automated Trading System (ATS). This trading system is where the orders from Authorised Dealer's Representative (ADR) are entered in the computer based system and then matched automatically by the system when trading time starts. Execution of matching orders continues to take place for the rest of trading session before the trading session comes to an end at 14:00 hours. Advantages of Automated Trading System among others includes: Increasing productivity due to increase in capacity to handle many transactions accurately; freeing LDMs and the DSE to concentrate on other key business activities e.g. marketing, public education and research; widening the client base for LDMs as it can be easily implemented countrywide; reducing human intervention which lowers transaction costs and reduces the chance of errors, thereby cutting out one area of operational risk; enabling the conduct of longer trading sessions as there are no human limitations due to automation; ensuring that

every buy or sell order receives maximum exposure; and giving equal treatment to market participants i.e. LDMs and strictly observes pre-defined Trading Rules as prescribed by the DSE. Table 1.3 summarizes the evolution of trading days and hours at the DSE.

**Table 1.3: Evolution of Trading Times at DSE**

<b>Year</b>	<b>Days</b>	<b>Days of Trade</b>	<b>Trading Hours</b>
Apr 1998 – Oct 2003	3	Tuesday - Thursday	10:00 – 11:30
Nov 2003 – Nov 2006	4	Tuesday - Friday	10:00 – 11:30
Dec 2006 – Jul 2013	5	Monday - Friday	10:00 – 12:00
Aug 2013 - To date	5	Monday - Friday	10:00 – 14:00

Source: DSE's Daily Market Report, August 2013

### **1.2.2 Indices of the DSE**

A share Index is a tool that can be used by investors to judge market portfolio performance, computation of security's systematic risk and examining factors that influence aggregate securities' price movements within a stock market. It is sufficient to say that the use of stock market indices is the standard method of assessing the performance of a stock exchange (Fumbuka, 2008).

From its first trading in 1998 till June 2007, the DSE had not established formal indices to gauge the performance of the stocks in different sectors. Individual investors and fund managers for corporations relied on their own ways to determine and decide which stocks they should invest in. Alternatively, there were privately developed indices by CORE Securities Company Limited, an LDM and a member of the Dar es salaam Stock Exchange. The indices were COREDEX Composite Index (CCI) and COREDEX Average Index (CAI).

The DSE launched its own All Share Index on 21<sup>st</sup> August 2007 abbreviated as DSEI. The DSEI includes all listed companies (local and cross listed securities). The facts that cross listed securities are inactive at the DSE, it is evident that the index did not reflect the true performance of Tanzanian stocks. Furthermore, the DSEI does not take into consideration sectorial performance of stocks. Therefore, in January 2009, DSE introduced 5 more indices to measure sectorial stock performance, locally listed securities performances and foreign cross listed securities. The indices introduced were Tanzania Share Index (TSI), Industrial and Allied (IA), Banks and Insurance/Investment (BI), Commercial Services (CS) and Foreign Share Index (FSI). All indices started at 1000 as a base value. Table 1.4 shows composition of securities in each index sector.

**Table 1.4: Sectorial Indices**

SN	DSEI	TSI	IA	BI	CS	FSI
1	TOL	TOL	TOL	DCB	SWISSPORT	KA
2	TBL	TBL	TBL	NMB	PAL	EABL
3	TATEPA	TATEPA	TATEPA	CRDB		KCB
4	TCC	TCC	TCC			JHL
5	SIMBA	SIMBA	SIMBA			NMG
6	SWISSPORT	SWISSPORT	TWIGA			ABG
7	TWIGA	TWIGA				
8	DCB	DCB				
9	NMB	NMB				
10	CRDB	CRDB				
11	PAL	PAL				
12	MBP					
13	KA					
14	EABL					
15	JHL					
16	KCB					
17	NMG					
18	ABG					
<b>Indices values as at 30 June 2014</b>						
	<b>DSEI</b>	<b>TSI</b>	<b>IA</b>	<b>BI</b>	<b>CS</b>	<b>FSI</b>
	2,172.71	3,561.62	4,071.10	3,502.78	1,981.85	1,164.95

Source: DSE Market Report of 30 June 2014

### **1.2.3 The Role of the Stock Exchange**

The main function of a stock exchange is to facilitate secondary market trading of listed securities and thereby provide price discovery mechanism of the same. Secondly, another function of the stock exchange is to facilitate capital raising. As such, a stock exchange is vital to the growth of an economy. It has implications for the flow of capital and the savings. Investment industries of the entire country are directly affected by the stock exchange. The channelling of savings into industries, green fields projects, job creation activities, the provision of housing, education and health care services, as well as the development of the infra-structure, are all affected to a greater extent by the workings of the stock exchange.

To illustrate the function of capital raising for companies, the DSE established a second tier market segment, Enterprise Growth Market (EGM) in 2013 to facilitate capital raising for Small and Medium Enterprises (SMEs). The listing requirements for companies seeking listing in EGM market segment is less stringent compared to listing in the Main Investment Market Segment (MIMS). In broad economic terms a primary role of a stock exchange is to gather a portion of the savings from the nation and pass them on as efficiently and effectively as possible to the users of capital, thereby creating productive capacity, employment and wealth and thereafter to provide a market in which investors may trade the securities of the listed companies. Thus, according to the (DSE Handbook, 2011) the main activities of a stock exchange can be seen as: (i) A market for raising capital in its primary form to develop new and to expand existing business; (ii) Creating the opportunities in which securities can be issued and investors may participate in the primary market; (iii) Providing a secondary market which not only is important in itself but, without

which, the primary market is impaired; (iv) An efficient mechanism for matching the supply and demand for capital. This is of benefit to those wishing to issue new securities; and (v) Providing a measure by which securities can be valued for the purpose, among others, of reflecting listed securities in financial statements; the valuation of “trust” type portfolios (such as pension funds) and the granting of credit against a security. The development of Capital Market in Tanzania and the DSE in particular is expected to play a vital role in the evolution of the country’s economy.

#### **1.2.4 Determinants of Capital Market Development**

Measuring stock market development is important because it is the guideline for predicting economic growth. In broad terms, it is found that saving rate, financial intermediary, stock market liquidity and the stabilization variable are the important determinants of stock market development (Naceur, et al, 2007). Also, there are additional variables useful for measuring stock market development. These includes; number of listed companies at the exchanges, market capitalization, value of shares traded, volume of shares traded and deals concluded(DSE Quarterly Update, 2011).

### **1.3 Pension Funds**

Pension Funds, can be defined as financial intermediaries, usually sponsored by non-financial companies, which collect and invest funds on a pooled basis for eventual payment to members in the form of pensions. Pension funds are among the most important institutions in certain national financial markets (Davis, 2005). Pension Funds are institutions established under the social security policy of a jurisdiction. The Social Security concept has been changing with time from the traditional ways of security to modern ones. Social security means any kind of collective measures or

activities designed to ensure that members of a society meet their basic needs and are protected from the contingencies to enable them maintain a standard of living consistent with social norms. Social security is defined in its broadest meaning by the International Labour Organization (ILO) as, “The protection measures which society provides for its members, through a series of public measures against economic and social distress that would otherwise be caused by the stoppages or substantial reduction of earnings resulting from sickness, maternity, employment injury, unemployment, disability, old age, death, the provision of medical care subsidies for families with children” (URT, 2003a).

In Tanzania, currently there are six (6) major formal institutions that provide social security protection, namely: National Social Security Fund (NSSF) (2007) formerly known as National Provident Fund (NPF) (1964), Parastatal Pensions Fund (PPF) (1978), Public Service Pensions Fund (PSPF) (1999), Government Employees Provident Fund (GEPF) (1942 RE 2002), Local Authorities Pensions Funds (LAPF) (2006) and National Health Insurance Fund (NHIF) (2006).

### **1.3.1 The role of Pension Funds in Capital Market Development**

The World Bank has consistently argued over recent years that, the long term aim of financial policy in Africa should be to strengthen the capital markets sufficiently to ensure that they become effective and efficient providers of finance for the necessary infrastructural and other essential long-term investment funding needs of the real economy (World Bank, 2010). To achieve this objective, it requires broader investor participation, a variety of market making players (brokers, dealers, and underwriters), and a wide range of financial instruments.



On one hand, what is required for the sustainable growth of financial sector is the considerable augmentation of the supply of long term securities on offer through capital markets. On the other hand, for markets to function well there must be a matching demand for such securities. Pension funds, with a stable source of funds are capable of playing an important role on the demand side for securities.

#### **1.4 Pension funds and Capital Market in Tanzania**

Pension funds in Tanzania have been investing in portfolios such as commercial loans, real estate, government securities, loan able funds, banks deposits and equities, all of which have contributed to social and macro-economic developments of the country.

From an investment perspective, investing in capital markets can be beneficial to Tanzanian pension funds from a long-term investment (strategic asset allocation) perspective and from a short-term investment (tactical asset allocation) perspective. Increased investment in capital markets securities by pension funds would likely affect the volatility of the asset class. On one hand, pension funds following strategic asset allocation guidelines would likely follow buy-and-hold strategies.

Hence, pension funds could contribute to stabilize markets as their behaviour simulates the behaviour of dedicated emerging market investors. On the other hand, if emerging market investment decisions are guided mainly by short-term tactical considerations, pension funds would tend to behave like other investors, getting in-and-out of positions rapidly, hence enhancing liquidity and pricing discovery function (Chan-Lau and Mathieson, 2004).

### **1.5 Statement of the Problem**

It is seventeen years since Capital Markets and securities Authority became operational in 1995/1996 as an autonomous body. Likewise it is sixteen years since DSE became operational in April, 1998. The establishment of these two bodies aimed at spear heading stock market activities in the country for individual gains and economic growth of Tanzanians. It has to facilitate the development of the small entrepreneurs and the small individual investors.

They have to focus further on sensitizing people and institutional investors to participate in buying and selling shares as well as encouraging firms and companies to go public and list. Moreover, an effective information disclosure is very important in the stock exchange that will make public more aware of what is taking place in the market. The attraction of investing in securities is liquidity. Investors generally like to be able to alter their positions (buy or sell) without an excessively long wait or moving the price against them. Do the DSE trading activities such as value of shares traded per annum, volume of shares traded per annum, deals concluded per annum and market capitalization suggest a development of stock market in Tanzania? McKinnon,(2001) argues that many stock exchanges in Africa are still in the process of developing, modernizing, or streamlining operational procedures. Therefore, trading and pricing mechanisms, clearing and settlement, and share registration and custody practices remain outdated.

Comparatively, pension funds have become the largest institutional investors in emerging markets. Capital Market stakeholders' expectations is that, pension funds would play a dynamic role in the development of capital markets in Tanzania,

fostering private sector savings and reducing the cost of capital for corporations, in the context of a broader strategy to achieve more developed financial systems. Pensioners save for the long run, therefore, pension funds (unlike other institutional or retail investors) are expected to be able to provide long-term financing to domestic corporations as well as governments. Moreover, pensioners (by law) provide a steady flow of funds for many years to pension funds, enabling the pension funds to be a stable source of capital. Importantly, since pensioners are required to hold their investments in at least one pension fund until retirement, this gives stability to the system as a whole. Furthermore, given their size and commission fees, pension funds should be able to professionally manage the asset allocation, diversify risk appropriately, and overcome problems of asymmetric information and transaction costs that encompass financial markets (Raddatz and Schmukler, 2008).

Given the fact that pension funds face the regulatory requirements to allocate a large fraction of their capital domestically and given the large size of their capital, they are expected to invest in a broad range of domestic assets and diversify risk as much as possible within the country. Therefore, relative to other institutional investors, pension funds are thought to be the ones which would contribute the most to the development of domestic capital markets.

However, the rising question now is, have pension funds significantly contributed to the development of capital market in Tanzania? Particularly, the increase of listed companies, the increase of the value of shares traded per annum, the increase of the volume (quantity) of shares traded per annum, the increase of market capitalization held by pension funds and the increase of the liquidity at the DSE? Thus, this study

is designed to determine the extent of the role played by pension funds in the aforementioned areas.

## **1.6 Research Objectives**

### **1.6.1 General Objectives of the Study**

The general objective of this research is to establish the level of pension fund contribution towards capital market development in Tanzania, particularly; assessing the participation of pension funds in Initial Public Offerings (IPO), growth of market capitalization, liquidity of the market, value of shares traded and the volume (quantity) of shares traded.

### **1.6.2 The Specific Objectives**

The specific objectives of the study are:

- (i) To assess the current level of DSE developments in terms of listed securities, market capitalization, liquidity of the market, value of shares traded per annum, volume of shares traded per annum and number of deals concluded per annum.
- (ii) To assess the extent of pension fund contribution to the increase of listed companies, value and volume of shares traded, market capitalization and liquidity of the DSE.
- (iii) To identify issues and prospects towards future developments of the DSE.

## **1.7 Research Question**

### **1.7.1 General Research Question**

To what extent pension funds have contributed towards development of capital market in Tanzania and Dar es Salaam Stock Exchange in particular?

### **1.7.2 Specific Research Questions**

- (i) What is the current level of DSE's development and performance in terms of; value of shares traded, volume of shares traded, market capitalization, deals concluded, the number of listed companies and the liquidity of the market.
- (ii) To what extent do pensionfunds have contributed to the increase of listed companies, value and volume of shares traded, market capitalization and liquidity of the DSE?
- (iii) What are the issues and prospects towards future developments of the DSE?

### **1.8 Scope of the Study**

The study is to be conducted at Dar es Salaam Stock exchange looking for the level of pension fund contribution towards development of capital market since its establishment. Due to constraints of resources, the study was limited on equities only. Therefore, the study was confined but not limited to the following inter related issues: (i) The current level of listed companies, value and volume of shares traded, market capitalization and liquidity of the DSE; (ii) Participation of pension funds in initial public offering (IPO); (iii) Percentage of market capitalization held by pension funds; (iv) Value of shares traded by pension funds; (v) Volume of shares traded by pension funds (vi) Contribution of pension funds to the Liquidity of the market; and (vii) Issues and prospects towards future developments of the DSE

### **1.9 Significance of the Study**

It is understood that the existence of positive effect of capital market development on growth has its main theoretical support in within the economy growth models whereby more liquid and efficient stock markets increase the incentives for long run investments, thus increasing economic growth (Levine and Zervos, 1998).

Apart from the recommendations that are given in this study, the findings can help regulators CMSA, SSRA, BOT and DSE, a self-regulatory organization (SRO) to instil investment guidelines, trading rules and regulations that enhances participation of pension funds in the secondary market trading activities at the DSE, which in turn accelerates economic development of Tanzania. Furthermore, the findings can stimulate further researches about the pension funds and capital markets development in Tanzania, to the areas where this study has not given much attention.

## **CHAPTER TWO**

### **2.0 LITERATURE REVIEW**

#### **2.1 Overview**

Having looked at background of the problem of this study in chapter one, this chapter reviews the literature on evolution of Pension Funds and development of capital markets. In order to make a detailed review the chapter is divided in two main sections that is theoretical literature review and empirical literature review.

#### **2.2 Conceptual Definitions**

##### **2.2.1 Pension Funds**

Pension Funds and Insurance companies are contractual savings institutions that obtain their funds through long term contractual arrangements. Pension funds generally acquire funds from employer and employee contributions while the employee is still working and provide the employee with payments during retirement (Saunders and Cornett, 2011). Pension funds usually invest in government securities, corporate bonds and equities. Pension funds are beneficial to individuals because they help employees plan and save for retirement. Because of the long term investment nature, pension funds commonly invest in long term higher yield securities

##### **2.2.2 Capital Markets**

Capital markets are the markets for long-term loan able funds as distinct from the money markets, which deals in short-term funds (Economic Commission for Africa, 1999). However, there is no clear-cut distinction between the capital markets and money markets. In principle, capital market loans are used by industry and

commerce mainly for fixed investment. The capital market is an increasingly international one and in any country the market is not one institution but all those institutions that supply and demand for long-term capital. In this respect, stock exchanges could be defined as the central point of the capital market (Economic Commission for Africa, 1999)

### **2.2.3 Stock Exchange**

Stock Exchanges are organized and regulated financial market where securities such as bonds and shares are bought and sold at prices governed by the forces of demand and supply. Stockexchanges basically serve as: (1) Primary markets where corporations, governments, municipalities, and other corporate bodies can raise capital by channelling savings of the investors into productive ventures; and (2) Secondary markets where investors can sell their securities to other investors for cash, thus reducing the risk of investment and maintaining liquidity in the market. Stock exchanges impose stringent rules, listing requirements, and statutory requirements that are binding on all listed and trading parties (Yartey, 2008). Trades in the old exchanges are conducted on the floor called the 'trading floor' of the exchange. Trading is by shouting orders and instructions (called open outcry system). On modern exchanges, trades are conducted online as it is a case of Dar es salaam Stock Exchange. Almost all exchanges are 'auction exchanges' whereby buyers enter competitive bids and sellers enter competitive orders through a trading system.

### **2.2.4 Initial Public Offering (IPO)**

An initial public offering (IPO) describes the first sale of stocks issued by a privately owned company. The main purpose for floating shares to the public market is the



company's high demand for capital. Often companies intend to raise large amounts of capital for particular purposes as for example the expansion of business. An IPO can be used by company owners to exit their current investments and cash out. Particularly, Governments, private equity and venture capitalists often use an IPO as a reasonable strategy to exit their investment. In addition, a public offer does not require the seller to exit the investment entirely.

The current business owner has the opportunity to sell the company only partially and, as a result, gain access to capital markets while maintaining a controlling stake in the company (Rudor and Schoon, 2006). In Tanzania so far, initial public offering has been used in three aspects, by the government to exit business from state owned companies, by new companies wishing to raise capital from the public, and by venture capitalists to liquidate part of their stake e.g. Danida Investment Fund in CRDB Bank Limited.

### **2.2.5 Value of Shares Traded**

Value of shares traded refers to the cumulative total of each transaction quantity multiplied by transaction price for all securities for a given period of time (Wuyts, 2007). Value of shares traded is commonly reported as a turnover in currency terms. Value of shares traded is an important factor to determine the liquidity of the market.

### **2.2.6 Volume of Shares Traded**

Volume of shares traded refers to the cumulative total of each transaction quantity for all securities traded over time (Fumbuka, 2008). Volume of shares traded and the number of deals completed are important factors to show the activeness of the market.

### **2.2.7 Market Capitalization**

Market capitalization shows the overall size of the stock market in currency terms and sometimes as a percentage of GDP (World Bank, 2010). The number of domestic listed companies is another measure of market size. Market capitalization can simply be defined as the cumulative total of the products of current share price for each individual listed company multiplied by its issued shares.

### **2.2.8 Liquidity**

Basically, liquidity refers to the ease with which an asset (in this case a security) can be turned into cash through an efficient market. That is, the ability to easily buy and sell securities. Levine and Zervos, (1996) identified two main reasons why liquidity is important in any stock market. The first is that liquidity relates to the riskiness of the investment. An investment is deemed to be less risky where investors are able to alter their portfolios quickly and cheaply. While the second, theoretically, allocation of capital is more efficient and as such liquid market enhances long-term economic growth. Added to the points above, Osinubi and Amaghionyeodiwe,(2003) pointed out that liquidity of the stock market facilitates profitable interaction between the stock market and the money market in that shares become easily acceptable as collateral for bank lending thereby boosting credit and investment. According to Wuyts, (2007) a market is liquid if traders can quickly buy or sell large numbers of shares without large price effects.

Harris, (1990) as quoted by Wuyts, (2007)distinguishes four aspects of liquidity. The first one is width, referring to the bid-ask spread for a given number of shares and commissions and fees to be paid per share. The second is, depth which is the number

of shares that can be traded at a given bid and ask prices. The third one is immediacy and it refers to how quickly trades of a given size can be done at a given cost. The final aspect is resiliency. It characterizes how fast prices revert to former levels after they changed in response to large order flow imbalances initiated by uninformed traders. Wuyts, (2007) describes the two main measures of liquidity; total value traded ratio and turnover ratio. Total value traded ratio is the total value of shares traded on the Stock market exchanged divided by GDP. It measures trading of equities as a share of national output. Normally, it should positively reflect liquidity on an economy wide basis. Turnover ratio is the value of total shares divided by capitalization. High turnover reflects low transaction costs.

## **2.3 Theoretical Literature Review**

### **2.3.1 Financial Development and Investment Productivity Theory**

The theories linking financial development and investment productivity are based on the financial repression hypothesis (Shaw, 1973). Financial repression refers to the notion that a set of government regulations, laws, and other non-market restrictions prevent the financial intermediaries of an economy from functioning at their full capacity. The policies that cause financial repression include interest rate ceilings, liquidity ratio requirements, high bank reserve requirements, capital controls, restrictions on market entry into the financial sector, credit ceilings or restrictions on directions of credit allocation, and government ownership or domination of banks

Supporters of this hypothesis suggest that many financial systems in Africa had been subjected to financial control characterized by low or negative real interest rates, high reserve requirements, mandatory credit ceilings; directed credit allocation to

priority sectors, which undermined allocative efficiency; and heavy government ownership and management of financial institutions. Financial repression in the African economies laid a basis for major financial reforms, including reforms in the capital market. Shaw, advocates for financial liberalization, which he argues that it contributes to increased possibilities of risk diversification by financial institutions, particularly if it involves the opening up of domestic markets to foreign competition. This helps reduce the cost of capital and improve the efficiency (Shaw, 1973).

Since the Shaw hypothesis, extensive theoretical literature focusing on the capital market has been developed. Some of the authors for instance, Levine and Zervos,(1996) have used the multifunctional approach of stock markets to link stock markets to investment efficiency. According to these authors, first, stock markets facilitate price discovery, price has information content and transmits signals to various stock holders in the market which facilitates decision making thus allowing allocation of resources to their best use. Second, stock markets promote efficient governance and control mechanisms by exerting external pressure and discipline in its operations.

The market serves as a signal to managerial performance. In an environment of uncertainty, contractual parties cannot easily observe or control one another and enforcement mechanisms are costly. Stock markets provide price-based monitoring mechanisms for suboptimal behaviour by management and hence put pressure on management to take corrective action. This is evident in the facilitation of takeovers by stock markets through price information, in which case, inefficient management is replaced by supposedly efficient management through accumulation of shares in the

open market by the new owners. Other authors however disagree with the above arguments contending that, due to dispersed stock ownership, individual investors are relatively small and they neither have the ability nor the incentives to acquire the costly yet necessary information for achieving efficient resource allocation, (Singh, 1997; Stiglitz, 2000). Furthermore, while stock markets can facilitate the collection of information on investment opportunities, they also make this information accessible to all market participants. This creates a free-rider problem which may discourage investors from expending resources to collect information (Stiglitz, 2000). Thus, according to these authors the positive linkages between stock markets and investment efficiency through information advantages may not increase.

### **2.3.2 Capital Market in Emerging Markets**

Emerging markets are working towards reforming and deepening financial systems, through the expansion of capital markets in order to improve their ability to mobilize resources and efficiently allocate them to the most productive sectors of the economy. A significant policy change has been established on privatization programs, which have facilitated reduction in public debt, improved incentives and efficiency in the operations of the privatized entities, and facilitated better access to capital through the floating of shares to the general public (Claessens, et al, 2001). Over the past two decades, capital markets in emerging markets have experienced a rapid evolution. The aggregate market capitalization of the countries classified by the IFC as emerging markets rose from \$488 billion in 1988 to \$2,225 billion in 1996. Trading on these stock markets rose in similar magnitude, growing from \$411 billion to \$1,586 billion in that period (Perotti and Van Oijen, 1999).

### **2.3.3 Development of Stock Market and Economic Growth**

Stock market is expected to accelerate economic growth by providing a boost to domestic savings and increasing the quantity and the quality of investment (Singh, 1997). The stock market is expected to encourage savings by providing individuals with an additional financial instrument that may better meet their risk preferences and liquidity needs. Better savings mobilization may increase the savings rate (Levine and Zervos, 1998). Stock markets also provide an avenue for growing companies to raise capital at lower cost. In addition, companies in countries with developed stock markets are less dependent on bank financing, which can reduce the risk of a credit crunch. Stock markets therefore are able to positively influence economic growth through encouraging savings amongst individuals and providing avenues for firms financing.

The stock market is supposed to ensure through the takeover mechanism that past investments are also most efficiently used. Theoretically, the threat of takeover is expected to provide management with an incentive to maximize firm value. The assumption is that, if management does not maximize firm value, another economic agent may take control of the firm, replace management and reap the gains from the more efficient firm. Thus, a free market is expected to provide the best guarantee of efficiency in the use of assets for corporates. Similarly, the ability to effect changes in the management of listed companies is expected to ensure that managerial resources are used efficiently. Efficient stock markets may also reduce the costs of searching for information. They may do so through the generation and dissemination of company specific information that efficient stock prices may reveal. Stock markets are efficient if prices incorporate all available public information. Reducing

the costs of acquiring information is expected to facilitate and improve the acquisition of information about investment opportunities and thereby improves resource allocation. Stock prices determined in exchanges and other publicly available information may help investor make better investment decisions and thereby ensure better allocation of funds among corporations, thus mounting to a higher rate of economic growth.

Stock market liquidity is expected to reduce the downside risk and costs of investing in projects that do not pay off for a long time. With a liquid market, the initial investors do not lose access to their savings for the duration of the investment project because they can easily, quickly, and cheaply, sell their stake in the company (Bencivenga, et al, 1996). Thus, more liquid stock markets could ease investment in long term, potentially more profitable projects, thereby improving the allocation of capital and enhancing prospects for long-term growth. It is important to point out, however, that, theory is ambiguous about the exact impacts of greater stock market liquidity on economic growth. By reducing the need for precautionary savings, increased stock market liquidity may have an adverse effect on the rate of economic growth.

Critics of the stock market argue that, stock market prices do not accurately reflect the underlying fundamentals when speculative bubbles emerge in the market (Bencivenga, et al, 1996). In such situations, prices on the stock market are not simply determined by discounting the expected future cash flows, which according to the efficient market hypothesis should reflect all currently available information about fundamentals. Under this condition, the stock market develops its own

speculative growth dynamics, which may be guided by irrational behaviour. Critics further argue that stock market liquidity may negatively influence corporate governance because very liquid stock market may encourage investor poor sight. Since investors can easily sell their shares, more liquid stock markets may weaken investors' commitment and incentive to exert corporate control. In other words, instant stock market liquidity may discourage investors from having long-term commitment with firms whose shares they own and therefore create potential corporate governance problem with serious consequences for economic growth (Bhide, 1994) as quoted by (Yartey, 2008).

Critics also point out that the actual operation of the pricing and takeover mechanism in a well-functioning stock markets lead to short term and lower rates of long term investment. It also generates awkward incentives, rewarding managers for their success in financial engineering rather than creating new wealth through organic growth (Singh, 1997). This is because prices react very quickly to a variety of information influencing expectations on financial markets.

Therefore, prices on the stock market tend to be highly volatile and enable profits within short periods. Moreover, because the stock market undervalues long-term investment, managers are not encouraged to undertake long-term investments since their activities are judged by the performance of a company's financial assets, which may harm long run prospects of companies, (Bencivenga, et al, 1996). In addition, empirical evidence shows that the takeover mechanism does not perform a disciplinary function and that competitive selection in the market for corporate control takes place much more on the basis of size rather than performance (Singh,



1997). Therefore, a large inefficient firm has a higher chance of survival than a small relatively efficient firm. These problems are further magnified in emerging markets especially sub-Saharan African economies with their weaker regulatory institutions and greater macroeconomic volatility. The higher degree of price volatility on stock markets in emerging markets reduces the efficiency of the price signals in allocating investment resources. These serious limitations of the stock market have led many analysts to question the importance of the system in promoting economic growth in African countries.

### **2.3.4 Determinants of Pension Fund Investment Performance in Capital**

#### **Markets**

The main determinants of the investment performance of the pension fund industry can be grouped into two main categories: investment regulations, and investment practices (Catalan, 2004). These two determinants are reviewed in detail.

#### **2.3.4.1 Investment Regulation**

In most emerging market countries, the regulation of private pension funds is based on quantitative investment limits. Regulators in emerging markets consider investment limits to protect pensioners' rights better than regulations based on the prudent man rule. This argument can be defended on the basis that the underdevelopment and lack of transparency of local securities markets make them prone to manipulation and excess volatility; and that the general public, pension fund board of trustees, and pension managers lack financial sophistication. There are a number of convincing arguments, however, against using investment limits as a regulatory tool, (Davis, 2005). In particular, investment limits may lead to

suboptimal portfolio holdings by restricting portfolios choices unnecessarily. Investment limits also imply that assets are evaluated by their individual risk level rather than by their contribution to the overall portfolio risk. In addition, investment limits are inflexible and cannot accommodate rapid changes in financial conditions or structural changes in financial markets.

In Tanzania, Pension funds are required to observe the investment guidelines issued in March 2012. The social security schemes investment guidelines, 2012 made under Section 26(2) of the Social Security (Regulatory Authority) Act No. 8 of 2008 on investment categories and limits, states that “A scheme shall only invest in the investment categories prescribed in these guidelines to the extent to which the market value of the investment in the category expressed as a percentage of the total assets of the scheme does not exceed the percentage prescribed hereunder”

**Table 2.1 Investments Categories and Limits**

<b>S/n</b>	<b>Investment Category</b>	<b>Investment limit as a percentage of Total Assets</b>
1.	Government debt (Treasury bills, Treasury bonds)	20 - 70
2.	Direct Loans to the Government	10
3	Commercial paper, promissory notes	40
	of which unlisted corporate debt	10
4.	Real Estate	30
	of which non-income earning property	5
5.	Ordinary and preferred Shares	15
	of which private equity	5
6.	Infrastructure investments	25
7.	Deposits with licensed banks and financial	35
8.	Investment in licensed collective investment	30
9.	Loans to corporates and cooperative societies	10
10.	Others subject to prior approval by the Bank	

Source: The Social Security Schemes Investment Guidelines, 2012

### 2.3.4.2 Investment Practices

In contrast to pension funds in mature markets, pension funds in emerging markets make their decisions on asset allocation and equity selection internally without the help of external consultants. Furthermore, in pension funds managed by private financial institutions there are strict Chinese walls between pension fund managers and other asset managers in the institution. Overall, investment portfolios in these countries are concentrated on government securities (Asher, 2003). In Tanzania, investment portfolio of most Pension Funds is composed of the Government securities, Bank deposits, Loans, Real estates, Equities and Corporate bonds. For instance, data from four pension funds as at June 2009 proves this practice and are presented in Table 2.2.

**Table 2.2 Investment Portfolio of Pension Funds as at June 2009 (TZS bln)**

S/n	Type of Investment	LAPF	NSSF	PPF	PSPF
1	Government Securities	104.78 (49.97%)	156.94 (18.32%)	86.88 (16.84%)	212.65 (31.39%)
2	Corporate Bonds	2.08 (0.99%)	8.45 (0.99%)	42.08 (8.16%)	11.99 (1.77%)
3	Bank Deposits	55.04 (26.25%)	149.29 (17.43%)	178.87 (34.68%)	167.50 (24.73%)
4	Equities	15.94 (7.60%)	62.99 (7.35%)	73.37 (14.22%)	86.00 (12.70%)
5	Real Estates	21.39 (10.20%)	198.16 (23.14%)	62.07 (12.03%)	16.51 (2.44%)
6	Loans	10.47 (4.99%)	280.66 (32.77%)	72.52 (14.06%)	182.70 (26.97%)
	<b>TOTAL</b>	<b>209.7</b>	<b>856.49</b>	<b>515.79</b>	<b>677.35</b>

Source: Baruti, 2009

## **2.4 Pension Funds and the Development of Capital Markets**

Pension funds achieve important economies of scale through pooling small savings, diversifying investments and monitoring market information. Institutional investors are also able to do this at a lower transaction cost. Institutional investors raise the level of professionalism within markets through requiring better information and increased transparency. Institutions are the largest pool of savings and investment, in emerging markets as well as mature economies. Efforts to mobilize savings in emerging markets therefore cannot ignore their dominant role. But in fact, severe restrictions are sometimes placed on their investment policies. For example, it is common to find public pension funds restricted to investing in government debt sometimes paying less than market rates. Restrictions placed on purchases of common stock, corporate debt or real estate keep rates of return to the funds low and deprive the domestic capital market of the largest source of investment and liquidity.

Since institutional investors (including pension funds) are equipped with sufficient information and specialized knowledge, they should be able to make independent and rational investment decisions to generate a reasonable profit (Goodfellow et al, 2009). However, some empirical studies indicate that institutional investors often follow other institutional investors to engage in hedging, that is, in buying or selling the same stocks over a period of time (Voronkova and Bohl, 2005). In addition, the allocation of pension funds' assets may also be excessively influenced by political interests that do not necessarily benefit contributors. Pension funds in Korea, for instance, have been asked repeatedly to contribute to stock market stabilization plans in recent years, according to press reports. It should be noted, though, that the increased asset allocation to equities has mainly been guided by efficiency and

diversification considerations (Chan-Lau and Mathieson, 2004). In Malaysia for instance (Holzmann et al, 2000) reported that provident fund assets have been used to recapitalize banks and finance housing construction. Despite the initial expectations, the actual impact that the increasing prominence of pension funds has had on the development of local capital markets is still a subject of debate. Catalan, (2004) argues that pension funds foster the deepening of domestic equity and debt markets through their demand for investment instruments and their effect on corporate governance, and that they add to the liquidity of these markets through their trading activities. Trading activities as referred by (Catalan, 2004) includes: participation of pension funds in the IPOs, the value and volume of shares traded, deals concluded and the market capitalization held by pension funds. Others maintain that pension funds do not contribute as expected to the development of capital markets, and are not investing pensioners' savings optimally (Yermo, 2005).

## **2.5 Empirical Literature Review**

### **2.5.1 Capital Market Development in Africa**

In the past 20 years (1990 – 2010), liberalization and privatization have become dominant themes in development strategies in Africa. The changing attitudes towards the role of the private sector in the development of African economies have facilitated the development of the capital markets. In the 1990s many countries in Africa set up stock exchanges as a precondition for the introduction of market economies under the structural adjustment programmes propagated by the international monetary institutions and to facilitate the privatization of state owned enterprises. Currently, Africa has twenty six securities exchanges, eleven of which began operations in the 1990s.

The majority of the countries establishing new exchanges in Africa have established new legal and regulatory regimes. International financial institutions such as the International Finance Corporation (IFC) of the World Bank and various bodies of experts belonging to national securities exchanges of industrialized countries have provided important assistance with a view to building the legislative, regulatory, and accounting basis for the proper running of African securities exchanges (Sheehan and Zavala, 2005)

The growth has not only been in market capitalization, but also in innovation such as the integration of regional markets in the francophone countries of West Africa. Eight (8) French-speaking members of the West African Economic and Monetary Union (UEMOA), namely, Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo created the world's first regional exchange, the Bourse Regionale des Valeurs Mobilières (BRVM- Regional Stock Exchange). The objective of the integration was the consolidation of the value of developing a common hub for capital market development in the geographical zone where these countries are located. The BRVM – Regional Stock Exchange has been innovative in using the most modern electronic and satellite communications equipment, which has enabled it to maintain performance despite the under-developed communications infrastructure in the individual countries comprising the exchange (Sheehan and Zavala, 2005). Another example of integration is in the East African Countries of Tanzania, Kenya, Uganda, Rwanda and Burundi which are currently in the process of integrating their stock markets into a regional East African stock market. The jobs, businesses, prosperity and future of the Africa lie in the stock markets' ability to mobilize capital for economic development and growth. The securities exchanges

can be a powerful tool for growing indigenous capital that will attract international capital if they are well designed and set up, properly regulated and supported by appropriate governmental policies (Sheehan and Zavala, 2005). At present, there are about twenty six stock exchanges in the continent (See Appendix 4).

## **2.5.2 Brief History of Oldest Stock Exchanges Worldwide, Africa and East**

### **Africa**

#### **2.5.2.1 Amsterdam Stock Exchange**

The Amsterdam Stock Exchange is considered the oldest in the world. It was established in 1602 by the Dutch East India Company (Verenigde Oostindische Compagnie, or "VOC") for dealings in its printed stocks and bonds. It was subsequently renamed the Amsterdam Bourse and was the first to formally begin trading in securities. The European Option Exchange (EOE) was founded in 1978 in Amsterdam as a futures and options exchange. In 1983 it started a stock market index, called the EOE index, consisting of the 25 largest companies that trade on the stock exchange. In 1997 the Amsterdam Stock Exchange and the EOE merged, and its blue chip index was renamed AEX, for "Amsterdam Exchange". It is now managed by Euronext Amsterdam.

#### **2.5.2.2 Casablanca Stock Exchange (La Bourse de Casablanca)**

The oldest stock exchange in Africa is Casablanca Stock Exchange (La Bourse de Casablanca) in Casablanca, Morocco. It was established in 1929 and currently has 16 members and 77 listed securities with a total market capitalization of \$66.3 billion as of December, 2011. The Casablanca Stock Exchange (CSE), which achieves one of the best performances in the region of the Middle East and North Africa (MENA), is

Africa's third largest Bourse after Johannesburg Stock Exchange (South Africa) and Nigerian Stock Exchange in Lagos. The exchange is relatively modern, having experienced reform in 1993. The CSE installed an electronic trading system, and is now organized as two markets: the Central Market and a Block Trade Market, for block trades. In 1997 the CSE opened a central scrip depository. Originally, CSE had the Index de la Bourse des Valeurs de Casablanca (IGB) as an index. IGB was replaced on January 2002 by two indexes:

MA SI - Moroccan All Shares Index, comprises all listed companies, allows to follow up all listed values and to have a long-term visibility.

MADEX - Moroccan Most Active Shares Index comprises most active companies listed continuously with variations closely linked to all the market serves as a reference for the listing of all funds invested in shares.

### **2.5.2.3 Nairobi Securities Exchange**

Nairobi Securities Exchange (NSE) is considered the oldest in East Africa. It was established in 1954; constituted as a voluntary association of stockbrokers registered under the Societies Act. Africans and Asians were not permitted to trade securities at the NSE. Business was conducted by resident Europeans only until 1963 when Kenya attained independence from Britain. Before 1963, there were about 10 listed companies. Activity at the stock market slumped at the dawn of Kenya's independence due to uncertainty about Kenya's economic future. However, the first three years of independence were marked by steady economic growth and the restoration of confidence in the market, with that result the NSE handled a high number of subscriptions of public issues.



By 1966, the NSE had begun measuring daily trading activity by computing the NSE Index. The index measured daily average price changes in 17 companies that were considered the most active stocks in the market. It was computed as a weighted average of price changes in the selected stocks and 1966 was used as the base year and set at 100 points. In 1984, the Government of Kenya through the Central Bank of Kenya in conjunction with the International Finance Corporation (IFC) conducted a study dubbed “Development of Money and Capital Markets in Kenya”. This study became a blue print for structural reforms in Kenya’s financial markets and culminated in the establishment of the Capital Markets Authority(CMA) in 1989 as a regulatory body that would enable the development of Kenya’s capital markets and the creation of a conducive environment for economic growth.

In 1988, the first privatization through the NSE was implemented when the government sold 20% of its stake at the Kenya Commercial Bank. In 1991 NSE was registered under the Companies Act and also adopted a 20-share index and changed the computational method of the index to a geometric mean. The number of stockbrokers also increased from six to fourteen when eight more were licensed. Subsequently, the IFC rated the NSE as the best performing market in the world with a return of 179% in dollar terms.

In 2000, Kenya, Uganda and Tanzania signed the Joint Stock Exchange taskforce to report on cross border listing. Subsequently, the East African Breweries Limited and the Kenya Airways proceeded to cross list at the Kampala and Dar es Salaam Stock Exchanges. Thereafter three other companies from Kenya (Kenya Commercial Bank, Jubilee Holdings Limited and Nation Media Group) and one from United

Kingdom (African Barrick Gold) have cross listed to DSE. In terms of empirical studies, there is a general consensus in most of them that stock market development enhances investment efficiency. In some of these studies, the authors examined the impact of financial sector development on the quality of investment and they established that the main channel through which stock market development affects growth is through investment productivity (Caporale, et al, 2005).

## **2.6 Evidence, Contribution of Pension Funds to the Development of Capital Markets**

Institutional investors, both local and foreigners, have become increasingly important for both asset management and the development of financial systems. In fact, institutional investors are among the most considered channels of private and public savings, supplying capital for corporations and countries to grow. Among institutional investors are pension funds. Pension funds tend to hold a large amount of securities; they buy and hold securities in their portfolios.

In early and late of 2000s years, governments across the world carried major reforms in pension systems. One key motivation factor of the pension reform was the expectation that these pension funds would play a dynamic role in the development of capital markets fostering private sector savings and reducing the cost of capital for corporations, in the context of a broader strategy to achieve more developed, market oriented financial systems (Raddatz and Schmukler, 2008).

Furthermore, Raddatz and Schmukler, (2008) argues that, given that pension funds face regulatory requirement to allocate a large fraction of their capital domestically and given the large size of their capital, they are expected to invest in a broad range

of domestic assets and diversify risk as much as possible within the country. Therefore, relative to other institutional investors, pension funds are thought to be the ones which contribute the most to the development of domestic capital markets. Also, Catalan et al, (2000) argues that contractual savings institutions (pension funds and life insurance companies) have a more important role in the development of capital markets compared to other investors, such as banks and open-end mutual funds. The authors claim that since contractual savings institutions have long-term liabilities on their balance sheets, they have a “natural advantage” in financing long-term investment projects relative to banks and open-end funds that have mainly short-term liabilities.

Despite the initial expectations of the governments on pension funds reforms, the actual impact of pension funds on the development of local capital markets is still subject to debate. Some authors (Davis, 1995; Vittas, 1995, 1999; Catalan, 2004; Catalan et al, 2000; Lefort and Walker, 2000; Corbo and Schmidt-Hebbel, 2003; and Andrade et al, 2007) as quoted by (Raddatz and Schmukler, 2008) argue that pension funds foster the deepening of domestic equity and debt markets through their demand for investment instruments and their effect on corporate governance, and that they add to the liquidity of these markets through their trading activity.

Others, (Arrau and Chumacero, 1998; Zurita, 1999; IMF and World Bank, 2004; Yermo, 2005; Olivares, 2005; Berstein and Chumacero, 2006; and The Economist, 2008) as quoted by (Raddatz and Schmukler, 2008) maintain that pension funds do not contribute as expected to the development of capital markets and are not investing pensioners' savings optimally.

## **2.7 Research Gap**

The focus of most of the studies that have been conducted in Tanzania has been mainly on financial market aspect as whole. Few qualitative studies have either concentrated on the emergence of capital market in Tanzania and the establishment of Dar es salaam Stock Exchange (DSE) and ignored the development and growth of capital market in Tanzania; also, most studies, have not distinguished the development of capital markets in terms of the contribution of pension funds responsible for investing Tanzanians money through their contribution *vis a vis* other direct capital market investments. This study attempts to bridge this gap.

## **CHAPTER THREE**

### **3.0 RESEARCH METHODOLOGY**

#### **3.1 Overview**

This chapter is about the research methodology. It explains how the study was conducted, and explains how various methods were used in the study. Different scholars have defined the research methodology concept. Kothari,(2004) defines research methodology as, a way to systematically solve the research problem or as a science of studying how research is done scientifically. The author further indicated that when we talk of research methodology we are not only talking of the research methods but also consider the logic behind methods we use in the context of our research study.

#### **3.2 Research Design**

Research design is a conceptual framework (structure) in which a research has been conducted and can be thought as the “glue” that holds together all of the elements in a research project (Kothari, 2004). In this study, the researcher employed both desk research and field research. In terms of desk research, the researcher sufficiently reviewed literature, concentrating on search of various academic literatures on theoretical development and empirical studies about the contribution of pension funds in the development of capital markets in an economy. Collection of quantitative and qualitative data outlined in section 3.7 sources of data, from published and unpublished sources was done. In terms of field research, the researcher used questionnaires to gather quantitative and qualitative data outlined in section 3.7 sources of data, from the member of staff of the directorate of planning

and investment of the pension funds, brokerage firms, investment advisors and the DSE.

### **3.3 Area of the Study**

This study was conducted in Dar es Salaam where DSE is located. Also, almost all pension funds, investment advisors and the brokers of the DSE have their head offices in Dar es salaam. Respondents for this research project came from DSE, Pension Funds, Brokers and Investment advisors. DSE is an important information provider for this study due to the fact that, DSE is the only stock exchange in Tanzania. All secondary market transactions for equity and bonds take place at DSE and are electronically kept.

### **3.4 Target Population**

Population is a group of individuals who have one or more characteristics in common (Best and Kahn, 1998). In this study, the population comprised of members of staff from: DSE (management team and operations staff), Pension Funds (directorate of planning and investment), Brokers (marketing and dealings or operations department) and Investment advisors. The number of respondents and the criterion used to select respondents from each category are defined in Section 3.5 sample size, and Section 3.6.2 sampling technique respectively. The role of DSE was to provide information with regard to number of listed companies at the exchange, market capitalization, value of shares traded in monetary terms, volume (quantity) of shares traded and the liquidity of the stock market for a period of five years starting 2007 through 2011. Also, DSE provided information about the contribution of pension funds in the above mentioned dimensions for the same period of 5 years.

Pension funds provided information with regards to investment portfolios of the funds for the period of 5 years. Brokers and Investment advisors provided information with regards to participation of pension funds in initial public offering (IPO). Furthermore, members of staff from DSE, Pension funds, Brokers and Investment advisors played an important role when discussing issues and prospects towards future developments of the DSE.

### **3.5 Sample Size**

Bryman and Bell (2003) says that there is no straight forward answer to the sample size. Instead time and cost considerations need to be addressed. The study used a sample of 29 respondents in total. Respondents were drawn from each group i.e. members of staff from DSE, Pension Funds, Brokers and Investment advisors. Seven people were from stock brokers (one respondent per brokerage firm), seven people were from Investment advisors (one respondent per investment advisor firm), five people were from DSE and ten people were from pension funds (two respondents from each pension fund).

### **3.6 Sample Selection Method**

A sample is the proportion of the population that participates in the study (Enon, 1998). It can be defined as a representative group drawn from the population known by the researcher. A sample in other words, is a small representation of a larger whole (Koul, 1996). On the other hand, sampling is a process of selecting samples or small groups representing the population.

### **3.6.1 Sampling Unit**

The sampling unit will consist of the members of staff from DSE, Pension Funds, Brokers and Investment advisors. The role of each member in the sampling unit is defined in Section 3.4.

### **3.6.2 Sampling Technique**

The sampling technique used in this study was purposive sampling. In purposive sampling, subjects are selected under established criteria from which one can learn the most (Kothari, 2004). This study comprised four (4) groups of respondents as defined in Section 3.4 target population. The criterion used for selection of respondents from each group was as follows:

From members of staff of the DSE, individuals able to provide information with regard to listed companies, market capitalization, value of shares traded, the volume of shares traded and the liquidity of the market were identified. To be included in responding to the questionnaire, respondents were required to have knowledge and experience of the capital market industry in Tanzania. Therefore, four respondents came from the management team and one respondent from operations department. From members of staff of the pension funds, individuals capable to provide information with regard to investment decisions and investment portfolio of the funds were targeted. Ten respondents (two from each pension fund) were selected from the directorates of planning and investment (DPI).

From members of staff of the brokerage firms and investment advisors, individuals capable to provide information about participation of pension funds in primary markets (IPO) and secondary markets were targeted. They were capable to give



details when encountering institutional investors and had knowledge and experience of the capital market industry in Tanzania and the pension funds. Fourteen respondents (one per each brokerage firm and investment advisors) were selected from management and among relevant departments namely marketing, dealing and operations.

### **3.7 Sources of Data**

Data refers to all information a researcher gather for his or her study (Mugenda, 2003). There are two types of data, Primary and Secondary data. This study used both primary and secondary data in investigating the contribution of pension funds in the development of capital market in Tanzania. Primary data came from pension funds, brokers and investment advisors. Secondary data came from DSE.

The researcher also extracted secondary data from Dar es salaam Stock Exchange by going through the quarterly update printed four times per annum at the end of March, June, September and December. The quarterly update printed at the end of December covers trading transactions for the whole year from January to December.

Data about participation of pension funds in IPOs were extracted from Brokers who were either lead advisor or sponsoring Broker during listing of a new company at the exchange. Data about the amount of funds invested by pension funds in different portfolios were extracted from the directorate of planning and investment of the pension funds and from annual reports of the pension funds. Data collected covered a period of five (5) years starting from January 2007 to December 2011.

### **3.7.1 Primary Source**

A primary source is an original source of the information being discussed; a primary source can be a person with direct knowledge of a situation, or a document created by such a person (Mugenda, 2003). Primary data such as approved funds for investment in capital market as percentage of total approved investment funds for a specific period, fund policy on investment on capital market were collected from pension funds. The purpose of this data was to establish how much pension funds are investing in capital market out of its available funds. Funds invested by pension funds in capital markets were collected from the DSE. Performance of pension funds when approached by stock brokers to exploit opportunities available in capital market was collected from stock brokers of the DSE. Therefore, primary data were obtained through questionnaires.

### **3.7.2 Secondary Source**

Secondary source is a document or recording that relates or discusses information originally presented elsewhere (Ghauri and Gronhaug, 2005). In this study secondary data were obtained through extensive review of existing information, published and unpublished documents from DSE, Brokers and investment advisors. Also, data were collected from reading investment policies, annual reports and all other documents deemed to be the source of information. Tables shown in appendix 2 and appendix 3, show the format of secondary data collected.

### **3.8 Data Collection Methods**

This refers to the specific methods that are used to collect data. While primary data were collected through questionnaires, secondary data were collected through documentary review and analysis of reports, both hard copies and soft copies.

### **3.7.1 Questionnaire**

A questionnaire consist of a number of questions printed or typed in a definite order on a form or set of forms (Kothari, 2004). The researcher used questionnaires for the purpose of establishing: (i) The contribution of pension funds in capital market development in Tanzania; (ii) The current level of DSE development and performance in terms of number of listed companies, value of shares traded, volume of shares traded, market capitalization and liquidity of the market; (iii) How much pension funds are investing in capital markets out of its total available investment bucket fund; (iv) Preference and risk mentality of pension funds towards investing in capital markets; and (v) Issues and prospects towards future development of the DSE

### **3.9 Data Processing and Analysis**

The spread sheet computer software application was used for processing and analysing data collected in this study. Spread sheet is a computer software application that uses a set of functions such as multiplications, divisions, subtractions and additions to analyse quantitative data for the purpose of having comparative conclusion. Furthermore, the spread sheet software application allows different types of graphs and charts to be drawn against set of given data for clarity and easy of reference.

In this study, the researcher used the spread sheet software to input and store data of five (5) consecutive years from 2007 through 2012. The researcher used word processing software application for production of report findings. The data collected included: (1) Overall list of listed companies, and number of listed companies per annum; (2) Value of shares traded annually; (3) Volume of shares traded annually;

(4) Market capitalization value at the end of each year; (5) Liquidity of the market (value of shares traded divided by market capitalization); (6) The value and volume of shares traded by pension funds annually; and (7) The percentage of market capitalization held by pension funds at the end of year. The above numbered data categories 1 to 5 collected for a period of 5 consecutive years were used to assess the current level of DSE development. The data categories numbered 6 to 7 collected over the period of 5 years were used to determine the contribution of pension funds in the development of capital market in Tanzania.

## CHAPTER FOUR

### 4.0 FINDINGS AND DISCUSSION

#### 4.1 Overview

The main objective of this study was to assess the contribution of pension fund in the development of capital market in Tanzania, particularly the DSE. Questionnaires were administered to respondents to obtain the required information that addressed the research questions. The aim of this chapter is therefore to present and discuss the findings.

Section 4.2 presents results of the analysis of respondents in terms of gender, age, education and job position. Section 4.3 addresses the first research objective which was to assess the current level of DSE developments in terms of listed companies, market capitalization, liquidity, value of shares traded per annum, volume of shares traded per annum and number of deals concluded. Section 4.4 addresses the second research objective which was to assess to what extent pension funds have contributed to the liquidity of the DSE. Section 4.5 addresses issues and prospects towards future developments of the DSE.

The questionnaire attracted 29 respondents from four different organisations, the Dar es salaam Stock Exchange, the Brokerage firms, the Investment advisory services and the Pension funds. The results are shown in Table 4.1. The number of male and female respondents was 69% and 31% respectively. Majority of respondents were aged between 30 and 50 representing 76% of the entire sample while 2 (7%) and 5 (17%) were under 30 years and above 50 years of age respectively. The results show

that majority of respondents were experienced enough to give reliable assessment of capital market development in Tanzania.

#### 4.2 Description of the Sample

**Table 4.1: Respondents to the Questionnaire**

Item	DSE Staff	Brokerage Firms	Investment Advisors	Pension Funds	Total
<b>1. Gender</b>					
Male	3	6	5	6	20
Female	2	1	2	4	9
Total	5	7	7	10	29
<b>2. Age</b>					
< 30 yrs	1	-	-	1	2
31 – 50	3	6	5	8	22
> 50 yrs	1	1	2	1	5
Total	5	7	7	10	29
<b>3. Education</b>					
Diploma	-	-	-	-	
Bachelor	1	3	1	2	7
Masters & above	4	4	6	8	22
Total	5	7	7	10	29
<b>4. Position</b>					
Officer	3	3	3	3	12
Senior Officer	1	1	2	5	9
Manager	1	3	2	2	8
Total	5	7	7	10	29

Source: Research data, 2013

Table 4.1 also presents an analysis of respondents' education. None of the respondents was of Diploma level. Only 24% of the respondents were first degree holders. The rest, about 76% had postgraduate qualifications. Again, this indicates that respondents were qualified enough to give reliable information on the subject matter. The last area of interest was on different positions being held by respondents within the organisation hierarchy. All managers, their age was between 30 - 50 years and above 50 years, also all were postgraduates. The percentage of female to male

managers, were 13% to 87% respectively. For senior officers, all of them were aged between 30 - 50 years and were all postgraduates. The percentage of female to male senior officers, were 56% to 44% respectively.

### 4.3 DSE Performance over 5 years (2007 – 2011)

**Table 4.2: DSE Performance over 5 years**

Category	2007	2008	2009	2010	2011	Average
Number of listed companies (local)	7	10	11	11	11	10
Number of cross-listed companies	3	4	4	4	6	4
Total number of listed companies	10	14	15	15	17	14
Value of shares traded (turnover – TZS-bltn)	29.69	32.94	48.75	35.99	51.76	39.83
Volume of shares traded (quantity-mln)	30.84	30.10	121.27	190.39	134.26	101.37
Deals concluded	14,989	15,283	21,271	11,336	12,234	15,023
Market capitalization - all comps (TZS-bltn)	3,154.28	4,865.32	5,030.34	4,895.47	11,577.05	5,904
Market Capitalization - local only (TZS-bltn)	932.95	1,668.15	1,925.50	1,836.80	2,395.42	1,752
Liquidity of the market - all companies (turnover/market Cap)	0.94	0.68	0.97	0.74	0.45	0.76
<b>Liquidity of the Market – Local only (Turnover/Market Cap)</b>	<b>3.18</b>	<b>1.97</b>	<b>2.53</b>	<b>1.96</b>	<b>2.16</b>	<b>2.36</b>

Source: Research data 2013



The performance DSE over the period of 5 years, analysed in terms the number of listed companies, value of shares traded, volume of shares traded, deals concluded, market capitalization and liquidity of the market is fairly not convincing when compared to other emerging markets in Africa.

Table 4.2 indicates that, for the entire period of 5 years from 2007 to 2011, there were only 7 new listed companies. However one company was delisted from the exchange. This represents an average of 1 listed company per year. Table 4.2 also shows that, the liquidity of the market is very low, an average of 2.36 and 0.76 when considering local companies only and all companies respectively. Furthermore, it is important to note that, the liquidity of the market gets smaller as the number of cross listed companies increases. This suggests that, the cross listed securities do not have positive impact on value and volume of shares traded at the DSE.

Table 4.2 shows that most variables in consideration, value of shares traded, volume of shares traded, deals concluded, market capitalization and liquidity of the market are not in constant rise for the past five years. Conclusively, the level of performance of trading activities at the DSE is not constantly on the rise year after year. This is a reflection of a stagnant market with occasional active trading activities.

On the other hand, when respondents (Table 4.3) were asked to rank the performance of DSE from its inception, about(41%) were of the opinion that the performance of DSE is bad, 31% said performance was fair, 28% said the performance is good. No one said the performance is best. From the survey, one can conclude that DSE ten years performance is not meeting expectations of market players. However, if you

group the overall performance in two groups of fair and bad, one can conclude that the performance of DSE in general is fair 59% against those who said the performance is bad 41%.

**Table 4.3 DSE General Performance**

<b>Respondent</b>	<b>Best</b>	<b>Good</b>	<b>Fair</b>	<b>Bad</b>	<b>Total</b>
DSE staff	0	2	2	1	5
Stock brokers	0	1	2	4	7
Investment Advisors	0	2	2	3	7
Pension fund	0	3	3	4	10
<b>Total</b>	<b>0</b>	<b>8</b>	<b>9</b>	<b>12</b>	<b>29</b>
<b>Percentage</b>	<b>0%</b>	<b>28%</b>	<b>31%</b>	<b>41%</b>	

Source: Research data, 2013

#### **4.4 Contribution of Pension Funds to the Performance of DSE**

The researcher was interested to find out the extent to which pension funds contribute to the performance of DSE in terms of their participation in initial public offering, value and volume of shares traded, market capitalization they hold and in improving liquidity of the market.

##### **4.4.1 Participation of Pension Funds in IPOs**

Table 4.4 present results of the analysis of pension funds' participation in initial public offering (IPOs). Most of the capital raised through IPOs comes from institutions other than pension funds and retail investors. Table 4.4 shows that the average subscription of pension funds during IPOs is very low, standing at an average of 8.86% for the entire period starting from 1998, when DSE was established, to 2012.

Interestingly, Table 4.4 shows that pension funds did not take part in the three IPOs namely, National Investment Company Limited (NICOL), Dar es salaam Community Bank (DCB) and Precision Air Services Plc. One need to carry out an analysis of how the three companies performed and are currently performing now, to come up with a sound argument of whether the pension funds were able to foretell overpricing of securities or securities deemed to be risky. The researcher could not get the value of TBL shares that were allotted to pension funds.

In conclusion, the best variable to measure the participation of pension funds in IPOs could have been to use the overall interest shown by pension funds in the IPO, that is, the subscription level of pension funds to total subscription level. The fact that subscription level of pension funds in each IPO is not easily available, the researcher resorted to value of shares allotted to pension funds over offer value of the particular IPO.

**Table 4.4 Shares allotted to the Pensions Funds in IPOs from 1998 to 2012**

<b>Company</b>	<b>IPO Price TZS</b>	<b>Offer Value TZS</b>	<b>Level of Subscription TZS</b>	<b>Percentage level of Subscription</b>	<b>Value of Shares Allotted to Pension Funds TZS</b>	<b>Shares Allotted to Pension Funds (%)</b>	<b>Listing Date</b>	<b>Share Holders</b>	
TOL	500	3,750,000,000	3,750,000,000	100	270,000,000	7.20	15/04/1998	10,500	
TBL	550	12,976,852,350	9,630,874,000	- 74.22			19/09/1998	23,000	
TATEPA	330	523,020,960	571,461,000	+ 109.26	26,400,000	4.62	07/12/1999	2,000	
TCC	410	7,995,000,000	9,394,125,000	+ 117.50	2,014,317,700	21.44	16/11/2000	7,508	
SIMBA	300	6,207,927,000	24,210,915,300	+ 390.00	323,280,000	5.21	26/09/2002	14,228	
DAHACO	225	3,969,000,000	31,196,340,000	+ 786.00	4,097,475	0.10	03/06/2003	41,025	
TWIGA	435	23,479,516,500	86,419,680,855	+368.00	444,707,895	1.89	29/09/2006	18,300	
NICOL	300	15,000,000,000	5,601,735,000	- 37.34	-	0.00	15/07/2008	2,986	
DCB	275	1,500,000,150	5,204,045,000	+346.94	-	0.00	16/09/2008	5,447	
NMB	600	63,000,000,000	224,999,340,000	+357.14	2,206,279,800	3.50	06/11/2008	28,636	
CRDB	150	18,814,453,800	82,624,366,200	+439.15	5,064,631,800	26.92	17/06/2009	21,285	
PAL	475	27,949,831,250	12,091,030,000	- 43.26	-	0.00	21/12/2011	7,057	
		Average allotment of shares to Pension Funds during IPOs					8.86%		

Source: Research data 2013

#### **4.4.2 Value and Volume of Shares Traded**

The value and volume of shares traded by DSE vs the value and volume of shares traded by pension funds over the period of five consecutive years from 2007 to 2011 is as shown in Table 4.5. Results presented in Table 4.5 indicate that, the average percentage of pension funds turnover of buying shares to the total DSE's turnover for a period of 5 years is 24.70%. Whereas, the average percentage of pension funds turnover of selling shares to the total DSE's turnover for a period of 5 years is 7.06%. This suggests pension funds are involved in buying and holding shares for longer terms. In other words, pension funds do not frequently rebalance their portfolios even when there is evidence of favorable price changes on the market.

Furthermore, when combined together, the buy and sell turnover by pension funds for a period of 5 years, the average percentage turnover of pension funds to the DSE's turnover, on average the percentage is going down (27.11, 12.21, 25.25, 5.52 and 9.32). This suggests, over years in consideration, the participation of pension funds in buying and selling shares at DSE is going down, contributing to decreasing liquidity on the market.

Notably, in 2009, the average percentage of buy and sell turnover by pension funds is higher, 25.25 contradicting the trend of otherwise going down. The possible reason towards that increase could be the listing of two major Banks in Tanzania at the DSE in 2008 and 2009. Towards the end of 2008, National Microfinance Bank Plc (NMB) was listed on 6 November. In 2009, CRDB Bank Public Limited Company (CRDB) was listed on 17 June.

**Table 4.5 DSE Performance and Pension fund contribution**

<b>CATEGORY</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Number of Listed Companies	10	14	15	15	17
Value of Shares Traded (Turnover - TZS)	29,686,931,845	32,937,300,985	48,753,820,813	35,986,848,090	51,760,363,743
Volume of Shares Traded (Quantity)	30,844,054	30,104,023	121,272,198	190,387,510	134,256,630
Deals Concluded	14,989	15,283	21,271	11,336	12,234
Market Capitalization - ALL COMPS ( TZS - billion )	3,154.28	4,865.32	5,030.34	4,895.47	11,577.05
Market Capitalization - LOCAL ONLY ( TZS - billion )	932.95	1,668.15	1,925.50	1,836.80	2,395.42
<b>Liquidity of the Market - All Comps (Turnover/Market Cap)</b>	<b>0.94</b>	<b>0.68</b>	<b>0.97</b>	<b>0.74</b>	<b>0.45</b>
<b>Liquidity of the Market - Local only (Turnover/Market Cap)</b>	<b>3.18</b>	<b>1.97</b>	<b>2.53</b>	<b>1.96</b>	<b>2.16</b>
Value of - BUY - Shares by PFs (Turnover - TZS)	11,546,732,880	6,277,355,930	24,173,340,238	1,969,868,010	5,437,646,203
Volume of - BUY - Shares (Quantity)	10,930,331	5,527,119	80,972,836	9,532,218	4,979,537
<b>Percentage of PFs - BUY - Turnover to the Turnover of DSE</b>	<b>38.90</b>	<b>19.06</b>	<b>49.58</b>	<b>5.47</b>	<b>10.51</b>

Value of - SELL - Shares by PFs (Turnover - TZS)	4,547,930,740	1,768,246,000	449,153,120	2,000,000,000	4,212,876,250
Volume of - SELL - Shares (Quantity)	4,190,813	1,077,600	1,002,066	1,000,000	2,913,700
<b>Percentage of PFs - SELL - Turnover to the Turnover of DSE</b>	<b>15.32</b>	<b>5.37</b>	<b>0.92</b>	<b>5.56</b>	<b>8.14</b>
<b>All pension funds' holding value – (TZS – billion)</b>	83,373,857,250	109,598,160,240	173,856,481,653	166,892,771,950	210,494,850,373
<b>Pension funds percentage holding of market capitalization</b>	8.83	6.57	9.03	9.09	8.79
<b>Average PFs turnover per annum including Buy and Sell</b>	<b>27.11</b>	<b>12.21</b>	<b>25.25</b>	<b>5.52</b>	<b>9.32</b>
<b>Average Percentage of PFs Buy turnover to the DSE's total turnover for 5 years 2007 - 2011</b>			<b>24.70</b>	<b>Combined averages buys &amp; sells</b>	
<b>Average Percentage of PFs Sell turnover to the DSE's total turnover for 5 years 2007 – 2011</b>			<b>7.06</b>	<b>15.88</b>	
<b>Average pension funds' holding for 5 years to the total market capitalization of DSE</b>			<b>8.46</b>		

#### **4.4.3 Market Capitalization of Pension Funds**

The average percentage of pension funds market capitalization to the total market capitalization of the DSE is averaged at 8.46% for the period of 5 years. This represents a less than 10% of the market value been held by the pension funds.

#### **4.4.4 Liquidity of DSE vs Pension Funds**

The liquidity the DSE for a period of 5 years, when considering local companies only is (3.18, 1.97, 2.53, 1.96 and 2.16) averaged to 2.36 Table 4.5. This is a very illiquid market. The illiquidity of the DSE, to some extent is contributed by low participation of the pension funds in the secondary market trading.

Table 4.5 shows that, for a period of 5 years, the combined averages of pension funds turnover resulting from purchases and sells of shares stood at 15.88%. On the other end, the low liquidity of the market, more than market size (capitalization), is of great concern to pension funds and the economy of the country at large in the light of the earlier evidence linking market liquidity to economic growth of the nation (Raddatz and Schmukler, 2008).

#### **4.4.5 Portfolio of Pension Funds**

Table 4.6 presents portfolio averages of pension funds for the period of 5 years.



**Table 4.6: Percentage of Portfolio Mixture of Pension Funds**

<b>CATEGORY</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>AVERAGE</b>
Government Securities	40.08	43.48	30.24	25.57	24.27	32.73%
Corporate Bonds	2.17	1.94	1.47	1.32	2.16	1.81%
Bank Deposits	9.08	18.30	29.34	31.05	26.56	22.87%
Equities	17.52	9.59	8.36	8.92	8.02	10.48%
Real Estate	10.20	10.08	8.88	8.07	14.27	10.30%
Loans	20.95	16.60	19.28	20.33	19.30	19.29%
Others			2.42	4.73	5.42	2.51%
<b>TOTAL</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	

Source: Research Data, 2013

One striking feature of pension funds' portfolio is the proportion they invest in assets that can be easily liquidated, namely, government bonds and bank deposits. For example, Table 4.6 shows that pension funds hold a significant segment of their portfolios in assets issued by Government (Government bonds) and financial institutions (mostly bank deposits). On average, for the entire period of five years, pension funds holds an average of more than half (74.89%) of its assets in Government bonds, bank deposits and loans.

For the period of five years, pension funds had an average of 10.48% of its total available funds for investments held in equities. In other words, equities (listed companies at DSE) were a fourth choice of investment by pension funds after they have considered Government securities, bank deposits and loans. Interestingly, the second choice of investment by pension funds, the bank deposits, with an average of 22.87% for the period of 5 years, is characterised by very low returns. This supports the earlier evidence by (Raddatz and Schmukler, 2008) who maintain the ideathat

pension funds do not contribute as expected to the development of capital markets and are not investing pensioners' savings optimally. To understand the behaviour of pension funds towards investment categories, it was also important to learn the ranking of preferred investments avenues and its perceived riskiness. Table 4.7 and Table 4.8 present the preferred ranking of investment avenues and most considered riskier avenues in priority order respectively.

### **Ranking of the Investment Avenues in Priority order by Pension Funds**

**Table 4.7: Ranking of most Preferred Investment Avenues by Pension Funds**

<b>S/n</b>	<b>Investment Category</b>	<b>Percentage</b>	<b>Rank</b>
1.	Government debt (Treasury bills, Treasury bonds)	20%	1
2.	Real Estate	18%	2
3.	Ordinary Shares of Listed Companies	16%	3
4.	Deposits with licensed banks and financial institutions with original maturity of at least six months (in call deposits, notice deposits, term deposits and certificate of deposits)	13%	9
5	Investment in licensed collective investment schemes	10%	4
6	Commercial paper, promissory notes and corporate bonds (including Residential Mortgage Backed Securities)	8%	5
7.	Direct Loans to the Government	7%	6
8.	Loans to corporate and cooperative societies	5%	7
9.	Infrastructure investments	3%	8
	<b>Total</b>	<b>100%</b>	

Source: research data, 2013

**Table 4.8: Ranking of most Riskier Investment Avenues by Pension Funds**

<b>S/n</b>	<b>Investment Category</b>	<b>Percentage</b>	<b>Rank</b>
1.	Loans to corporate and cooperative societies	19%	1
2.	Direct Loans to the Government	17%	2
3.	Infrastructure investments	16%	3
4.	Deposits with licensed banks and financial institutions with original maturity of at least six months (in call deposits, notice deposits, term deposits and certificate of deposits)	14%	4
5.	Commercial paper, promissory notes and corporate bonds (including Residential Mortgage Backed Securities)	13%	5
6.	Ordinary Shares of Listed Companies	9%	6
7.	Investment in licensed collective investment schemes	6%	7
8.	Real Estate	4%	8
9.	Government debt (Treasury bills, Treasury bonds)	2%	9
	<b>Total</b>	<b>100%</b>	

Source: Research data 2013

Results in Table 4.7 shows that the most preferred investment avenues by pension funds are Government debt (treasury bills and treasury bonds) followed by real estate and then ordinary shares of listed companies. The Deposits with licensed banks and financial institutions, as an investment avenue comes fourth. The fifth avenue is the investment in licensed collective investment schemes. Table 4.8 shows that the most risky investment avenue as per pension fund analysis is loan to cooperate and cooperative societies followed by direct loans to the government and then infrastructure investments. The fourth and fifth most risky investment avenues are

deposits with licensed banks and financial institutions and commercial paper, promissory notes and corporate bonds (including residential mortgage backed securities). Therefore, one can conclude that participation of pension fund in capital market is also affected by risk appetite and risk averseness of the funds. However, results presented in Table 4.6 showing the portfolio averages of pension funds for the period of 5 years, which is the actual practice of the pension funds, contradicts the risk appetite and risk averseness of the pension funds. In practice, according to Table 4.6 the investments of the pension funds are concentrated in the following order, Government securities, bank deposits, loans, equities and then real estate. Again this supports the earlier evidence by (Raddatz and Schmukler, 2008) who maintain the idea that pension funds do not invest pensioners' savings optimally.

#### **4.5 Issues and Prospects vs Future Developments of the DSE**

To determine issues and prospects towards future developments of the DSE, the researcher considered five factors, the cross listing, Introduction of investment guideline by Social Security Regulatory Authority (SSRA), the Telecom bill, the Mining bill and the liberalization of capital account. The factors are coded A, B, C, D, and E respectively for ease of referencing: (A) Cross listing; (B) Introduction of investment guideline by SSRA; (C) Telecom bill; (D) Mining bill; and (E) Liberalization of capital account.

Respondents were asked whether the implementation of each of the named factors will have the positive impact on the development of the DSE in terms of the DSE's identified development variables. The response from respondents is summarized in Table 4.9

**Table 4.9: Prospects with Positive Impact on the Development of DSE**

<b>Variables / Factors</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TOTAL</b>
Number of listed Companies	6	4	9	9	1	<b>29</b>
	21%	14%	31%	31%	3%	<b>100%</b>
Value of shares traded (Turnover)	2	6	10	9	2	<b>29</b>
	7%	21%	34%	31%	7%	<b>100%</b>
Volume of shares traded (Quantity)	2	6	10	9	2	<b>29</b>
	7%	21%	34%	31%	7%	<b>100%</b>
Deals concluded	2	5	9	10	3	<b>29</b>
	7%	17%	32%	34%	10%	<b>100%</b>
<b>Aggregate % on all variables</b>	<b>10%</b>	<b>18%</b>	<b>33%</b>	<b>32%</b>	<b>7%</b>	<b>100%</b>

Source: Research data 2013

Prospects that have positive impact on the development of the DSE according to respondents in (Table 4.9) are first, the implementation of telecom bill and mining bill that requires all telecom companies and mining companies in Tanzania to be listed on the stock exchange. 65% of respondents viewed the Telecom and Mining bill as presenting fertile prospects to the development of capital markets as measured by the variables in Table 4.9. Second, the introduction of social security investment guidelines, (about 18%) that provide pension funds with investment guidelines, this will increase the participation of the pension funds in secondary market trading, hence increase the liquidity of the market. Third, the cross listing of foreign companies to DSE will have a noticeable impact on future development of the DSE (about 10%). The liberalization of capital account is ranked with the least percentage (about 7%) of been a contributing factor to future development of the DSE. Surprisingly, as at the end of 2012, the number of cross listed companies constituted

41% and 77% of listed companies and market capitalization respectively. However, according to respondents, the aggregate percentage of cross listing been a contributing factor to the development of DSE is only 10% as shown in Table 4.9.

## **CHAPTER FIVE**

### **5.0 CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Overview**

The research work was about to study the contribution of pension funds to the development of capital markets in Tanzania, particularly the Dar es salaam stock exchange (DSE). In other words, the research work centred its focus on determining the extent to which pension funds have contributed to the activeness of the trading activities at the DSE.

The main objective of this research was to establish the level of pension fund contribution towards capital market development in Tanzania, particularly; assessing the participation of pension funds in Initial Public Offerings (IPO), growth of market capitalization, liquidity of the market, value of shares traded and the volume (quantity) of shares traded. Furthermore, the research aimed at identifying issues and prospects for the future development of DSE.

The researcher used questionnaires, documentary review and analysis of reports to gather relevant information to accomplish the research work. Research questionnaires were administered to respondents to obtain the required information that addressed the research questions. Recommendations are made with respect to research findings, which would assist pension funds, capital market players and government to take action for development of capital market in Tanzania. This chapter is divided into five main parts; section 5.2 gives a summary of key findings, section 5.3 gives details of the implications of the results, section 5.4 gives

conclusion of the research work, section 5.5 gives recommendations and section 5.6 gives the limitations of the study and areas of future studies with regard to the contribution of pension funds to the development of capital markets in Tanzania.

## **5.2 Summary of Key Findings**

From findings and discussions in chapter 4 sections 4.4.1 through 4.4.5 and section 4.5 the following are the summary of key findings:

1. There is low participation of pension funds in IPOs. From the inception of DSE in 1998 to 2012, the subscription level of pension funds is only 8.86% of all subscriptions
2. Pension funds hold a small fraction of DSE's market capitalization, about 8.46%.
3. Pension funds purchases and holds securities (shares). The average percentage of pension funds buy turnover to the DSE's total turnover over the period of 5 years is 24.70%. Whereas, the average percentage of pension funds sell turnover to the DSE's total turnover over the same period of time is 7.06%
4. Liquidity of DSE for the period of 5 years in question is very small, averaged to 2.36. The illiquidity of DSE is partially contributed by low participation of pension funds in secondary market purchases and sells. The combined average of pension funds turnover resulting from purchases and sells of shares is 15.88% only
5. Portfolios of pension funds is mainly (about 74.89%) made up of Government bonds, Bank deposits and loans.



6. Investment in equities (shares) is considered to be a risk investment by pension funds
7. Future developments of the DSE in terms of growth of market capitalization, liquidity of the market, value of shares traded and the volume (quantity) of shares traded depends on listing more companies, specifically companies from mining and telecommunications sectors.

### **5.3 Implications of the Results**

The implications of key findings from the research as narrated in section 5.2 will be discussed into two main categories; the knowledge based point of view and or the practical side of it.

1. The low participation of pension funds in IPOs and pension funds holding a small fraction of the market capitalization –These are typical characteristics of capital markets in emerging market economy, where both the primary and secondary markets operations are limited in terms of players, instruments, turnover and liquidity.
2. Pension funds buy and hold shares and the liquidity of the DSE been small – Findings from this study were consistent to that of similar previous studies. That is, in markets where there are few investable securities, pension funds and other institutional investors, that generate long-term contractual savings, will purchase and hold securities. For example, for the case of government securities, pension funds hold government bonds to maturity. Furthermore, the low liquidity of the DSE reflects a typical secondary market of securities in emerging market economies.

3. Concentration of pensions fund's portfolios in government securities (bonds) and the opinion of pension funds that investing in shares is a risky investment – Practically most of the institutional investors regard government securities the risk-free investments. With that in mind, other factors of consideration when deciding investment options like rate of return and growth rate are not considered. Probably, this suggests and highlights the need of specialized fund managers to manage portfolios of institutional investors, like the pension funds.
4. Future developments of the DSE depends on listing more companies – Practically, listing more companies in the exchange from sectors with the high growth rate will result to increased market capitalization, more shares changing hands between investors and increased turnover. In Tanzania, currently, the mining and telecommunication sectors have the highest growth rate. On the other hand, DSE has witnessed six cross listed securities, 5 companies from Kenya and 1 company from the United Kingdom (UK). As at December 2012, the cross listed companies accounted for 41% of DSE's market capitalization. However, the development of the DSE appears to lack correlation with the cross listing of companies. This area requires more study.

#### **5.4 Conclusion**

This study sought to explore the contribution of pension funds to the development of capital market in Tanzania. It empirically examined Tanzanian pension funds overall participation to DSE trading activities. The development of the capital markets in an economy gives the pension funds greater opportunities for portfolio diversification (in the local market); it avoids distortion of the markets concerned, caused by the

concentration of the demand in just a few instruments; it makes it possible to lower investment management costs; and contributes towards lowering supervision costs.

However, in Tanzania many of the pension funds have decision restrictions from their board of trustees and lack of efficient systems for carrying out transactions and custody services. Therefore, from findings and discussions in chapter 4 sections 4.4.1 through 4.4.5 and section 4.5 the key findings of the study are outlined in section 5.2 which brings to the following conclusion:

1. The low participation of pension funds in IPOs and pension funds holding a small fraction of DSE's market capitalization is attributed by the decision restrictions and lack of efficient systems for valuation of investment opportunities. In addition, there are no adequate mechanisms in place to oversee pension fund investments such as utilization of fund managers who can practice recently introduced investment guidelines.
2. Pension funds buy and hold securities together with the low liquidity of the DSE. This is attributed by the lack of investable securities in the market. Therefore pension fund investments are concentrated in government securities and securities from a limited number of local companies, regarded as "blue chip" companies such as Tanzania Cigarette Company Limited (TCC), Tanzania Breweries Limited (TBL) and Tanzania Portland Cement Company Limited (TWIGA). My findings also show that five years average parentage turnover from pension funds is 15.88, this indicate that contribution of pension fund for last five years is very small despite of having growing assets.

3. Portfolios of pension funds been made up of mainly the Government securities and the perception of pension funds that investing in shares is a risky investment – This concurs to the noted conclusion above that there are decision restrictions within pension funds, there are no efficient systems to perform valuations of investment opportunities and there are no adequate mechanisms currently in place to oversee pension fund activities such as the utilization of fund managers.
4. Future development of the DSE depends on listing more companies, specifically companies from mining and telecommunications sectors – This opinion concurs with the Ministry of Finance report that, mining and telecommunications, are among the fastest growing sectors in Tanzania. Therefore, listing of companies from these sectors will attract more participation from the public, thus, there will be significant growth in terms of market capitalization, liquidity of the market, value of shares traded and the volume (quantity) of shares traded.

### **5.5 Recommendations**

This study sought to find out the contribution of pension funds to the development of capital market in Tanzania. The study examined the participation of pension funds in the IPOs and overall trading of the secondary market of the DSE.

In totality, the result suggests that average annual turnover contributed by pension funds to DSE, percentage allocation of their assets to capital market especially equities, and average subscription to the past IPOs are not significantly affecting speed of capital market development in Tanzania. Most of respondents are of the

view that pension funds are not participating enough to make the DSE more vibrant instead are buying and holding, as a result they reduce market liquidity. Thus, the study puts forth the following recommendations:

1. Professional fund or asset managers are an integral part of the financial market infrastructure. Absence of professional asset management is one of the factors that minimize pension funds participation in capital market, the study recommend to speed up the process of licensing fund managers, and put a demand to pension funds, that investments must go through licensed and independent fund managers.
2. Lack of investable securities in the market or lack of products, the study recommends that, Capital Market and Securities Authority (CMSA) and the DSE should play their roles, and put together their efforts to ensure there are more listing on the exchange from different sectors of economy.
3. The study recommends enforcement to Social Security Regulatory Authority investment guide lines that requires more than 10% of pension fund assets to be invested in listed equities. Government through SSRA should increase asset base of the retirement benefits industry through encouraging adoption of prudent management principles; thereby increasing the demand for capital markets products.
4. Future development of the DSE depends on listing more companies, specifically companies from mining and telecommunications sectors. This study recommends to the Government to fast track the implementation of Mining and Telecommunication bills.

## **5.6 Limitations of the Study and Areas of Future Studies**

The scope of the study was to study the level of pension fund contribution towards development of capital market in Tanzania, particularly the DSE from its establishment. Therefore, the study was confined to, but not limited to the inter-related issues:

- (i) The current level of listed companies, value and volume of shares traded, market capitalization and liquidity of the DSE;
- (ii) Participation of pension funds in initial public offering (IPO);
- (iii) Percentage of market capitalization held by pension funds;
- (iv) Value of shares traded by pension funds;
- (v) Volume of shares traded by pension funds;
- (vi) Contribution of pension funds to the Liquidity of the market; and
- (vii) Issues and prospects towards future developments of the DSE.

However, more research need to be done to understand better the patterns uncovered in this study. A large part of the research could be devoted to obtaining good benchmarks against which pension funds' asset allocation could be injected into equities market, something that this study lacks and that would help derive more precise conclusions.

In particular, future work could focus on two different but related issues: The role of institution investors to the growth of capital market in Tanzania, and the role of pension funds to the liquidity of stock market in Tanzania. Another direction would be to measure in a better way the contribution of pension funds. One such measure is to obtain data from Lead Advisor of each IPO and calculate interest by taking

pension funds subscription scaled by total subscription. This can also be compared to the level of under / overpricing of a security. The issue is to isolate whether the non-participation captured by the measure used in this study is a reflection of lack of allotment or of the fact that pension funds were able to avoid overpriced IPOs.

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## APPENDICES

### APPENDIX I

#### QUESTIONNAIRE

This questionnaire is prepared to facilitate the collection of data which will help the researcher to determine *The Contribution of Pension Funds in the Development of Capital Markets in Tanzania*. The information collected in this questionnaire is intended solely for academic purposes and will be treated confidential. Target respondents includes: Members of staff from DSE, Brokers, Investment advisors and Pension Funds.

#### **PART A**

1. Institution Name ..... (Optional)
  2. Department..... (Optional)
  3. Position .....
  4. Gender (Please tick) Male [  ] Female [  ]
  5. Age. (a)Below 30 [  ] (b)Between 31 - 50 [  ] (c)Above 51 [  ]
  6. Education. (a)Diploma [  ] (b)Bachelor degree [  ] (c)Masters & Above [  ]
- 

#### **PART B**

1. It is 14 years now (2012) since DSE started its operations in 1998. By 31<sup>st</sup> December 2011, DSE had 11 local companies and 6 cross listed companies. For 2011 the value of shares traded (turnover) was TZS 51.7 Bln, the volume of shares traded (quantity) was 134.3 Mln and around 12,000 deals. The Market capitalization was TZS 11,577.05 Bln and a Liquidity ratio of 0.45%. How has DSE performed in terms of the given criteria compared to other emerging markets? (Please Tick)

Category /Rank	Best	Good	Fair	Bad	Poor
Number of listed Companies					
Value of shares traded per Annum (Turnover)					
Volume of shares traded per Annum (Quantity)					
Deals concluded per annum					
Market Capitalization					
Liquidity of the market					

Please comment on your answer for any given criteria above:

.....  
 .....

2. Please specify the percentage (%) contribution of each group of your clients in terms of equity (stock) turnover generated by your company (**BROKERS ONLY**)

- (i)Employed [     ]  
 (ii)Self employed [     ]  
 (iii) Businessman [     ]  
 (iv) Pension Funds [     ]  
 (v) Corporate (Excluding Pension Funds) [     ]

3. There are issues and prospects towards future development of the DSE. The issues includes the cross listing of securities from foreign economies. Prospects includes the introduction of investment guidelines for pension funds, Electronic and Postal Communications Act 2010 and mining Act 2010 that guides companies in these industries to join the DSE after a certain period of operation in Tanzania, and the liberalization of capital account. Please tick accordingly issues and prospects that

will have a **POSITIVE IMPACT** against each criteria for the development of capital market in Tanzania. (Please Tick)

<b>Category /Rank</b>	<b>Cross listing</b>	<b>Introduction of SSRA investment guideline</b>	<b>Electronic and Postal Communications Act 2010</b>	<b>Mining Act 2010</b>	<b>Liberalization of capital account</b>
Number of listed Companies					
Value of shares traded per Annum (Turnover)					
Volume of shares traded per Annum (Quantity)					
Deals concluded per annum					
Market Capitalization					
Liquidity of the market					

4. In Tanzania, Pension funds normally invests in Government debt (Treasury bills, Treasury Bonds), Real Estate, Direct loans to the Government, Commercial papers, Ordinary Shares of listed companies, Infrastructure investments, Deposits with licenced banks and financial institutions, collective investment schemes and Loans to Corporates and Cooperative Societies. When investing, kindly rank the investment avenues in priority order (1 – 4).



**(PENSION FUNDS ONLY)**

1 = Most preferred, 2 = preferred, 3 = Less preferred 4 = Not preferred (avoid).

<b>S/n</b>	<b>Investment Category</b>	<b>Rank</b>
1.	Government debt (Treasury bills, Treasury bonds)	
2.	Direct Loans to the Government	
3.	Commercial paper, promissory notes and corporate bonds (including Residential Mortgage Backed Securities)	
4.	Real Estate	
5.	Ordinary Shares of Listed Companies	
6.	Infrastructure investments	
7.	Deposits with licensed banks and financial institutions with original maturity of at least six months (in call deposits, notice deposits, term deposits and certificate of deposits)	
8.	Investment in licensed collective investment schemes	
9.	Loans to corporates and cooperative societies	

5. In Tanzania, Pension funds normally invests in Government debt (Treasury bills, Treasury Bonds), Real Estate, Direct loans to the Government, Commercial papers, Ordinary Shares of listed companies, Infrastructure investments, Deposits with licenced banks and financial institutions, collective investment schemes and Loans to Corporates and Cooperative Societies. What do you think are the most risky avenues for investment? Kindly rank the risk avenues in priority order (1 – 4).

**(PENSION FUNDS ONLY)**

1 = Highrisk, 2 = Medium risk,3 = Low risk, 4 = No risk

<b>S/n</b>	<b>Investment Category</b>	<b>Rank</b>
1.	Government debt (Treasury bills, Treasury bonds)	
2.	Direct Loans to the Government	
3.	Commercial paper, promissory notes and corporate bonds (including Residential Mortgage Backed Securities)	
4.	Real Estate	
5.	Ordinary Shares of Listed Companies	
6.	Infrastructure investments	
7.	Deposits with licensed banks and financial institutions with original maturity of at least six months (in call deposits, notice deposits, term deposits and certificate of deposits)	
8.	Investment in licensed collective investment schemes	
9.	Loans to corporates and cooperative societies	

**THANK YOU VERY MUCH FOR PARTICIPATING IN THIS SURVEY**



**APPENDIX IV**

## African Stock exchanges and number of listings

<b>Exchange</b>	<b>Location</b>	<b>Founded</b>	<b>Listings</b>
Bourse Régionale des Valeurs Mobilières	Abidjan	1998	39
Bourse d'Alger	Algiers	1997	3
Botswana Stock Exchange	Gaborone	1989	44
Douala Stock Exchange	Douala	2001	2
Egyptian Exchange	Cairo, Alexandria	1883	150
Bolsa de Valores de Cabo Verde	Mindelo	2005	4
Ghana Stock Exchange	Accra	1990	34
Nairobi Stock Exchange	Nairobi	1954	50
Libyan Stock Market	Tripoli	2007	7
Malawi Stock Exchange	Blantyre	1995	8
Stock Exchange of Mauritius	Port Louis	1988	88
Casablanca Stock Exchange	Casablanca	1929	81
Bolsa de Valores de Moçambique	Maputo	1999	3
Namibia Stock Exchange	Windhoek	1992	34
Abuja Securities and Commodities Exchange	Abuja	1998	12
Nigerian Stock Exchange	Lagos	1960	223
Rwanda Stock Exchange	Kigali	2005	5
Johannesburg Stock Exchange	Johannesburg	1887	410
Khartoum Stock Exchange	Khartoum	1995	53
Swaziland Stock Exchange	Mbabane	1990	10
Dar es Salaam Stock Exchange	Dar es Salaam	1998	18
Bourse des Valeurs Mobilières de Tunis	Tunis	1969	56
Uganda Securities Exchange	Kampala	1997	14
Agricultural Commodities Exchange of Zambia	Lusaka	2007	12
Lusaka Stock Exchange	Lusaka	1994	16
Zimbabwe Stock Exchange	Harare	1993	81

Source: ASEA: [www.african-exchanges.org](http://www.african-exchanges.org) of December 31<sup>st</sup> 2013