

ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

SOCIAL SECURITY FUND INVESTMENT PRACTICE AND CHALLENGES IN ETHIOPIA: THE CASE OF SOCIAL SECURITY AGENCY

BY

BERIHUN TASSEW

JUNE, 2017

ADDIS ABABA

ETHIOPIA

ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

SOCIAL SECURITY FUND INVESTMENT PRACTICE AND CHALLENGES IN ETHIOPIA: THE CASE OF SOCIAL SECURITY AGENCY

BY

BERIHUN TASSEW

SUBMITED TO:

SCHOOL OF GRADUATE STUDIES IN PARCIAL FULFILMENT FOR THE REQUIRMENT OF MBA IN ACCOUNTING AND FINANCE

JUNE, 2017 ADDIS ABABA ETHIOPIA

APPROVAL SHEET ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

SOCIAL SECURITY FUND INVESTMENT PRACTICE AND CHALLENGES IN ETHIOPIA: THE CASE OF SOCIAL SECURITY AGENCY

BY

BERIHUN TASSEW

APPROVED BY BOARD OF EXAMINORS

Dean, Graduate Studies

Advisor

External Examiner

Internal Examiner

Signature & Date

Signature & Date

Signature & Date

Signature & Date

DEDICATION

I dedicated this project manuscript to my late father Ato Tassew Abera for his contribution to my life and helped me through different circumstances but who lost such a chance, may he rest in peace.

DECLARATION

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

Name

Signature

St. Maryøs University, Addis Ababa

June, 2017

ENDORSMENT

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

Advisor

St. Maryøs University, Addis Ababa

Signature

June, 2017

TABLE OF CONTENTS

CONTENTS

CHAPTER

Ι

Π

PAGE

ACKNOWLEDGEMENTS í í í í í í í í í í í í í í í í í í í	i
ABRIVATIONS AND ACRONYMS í í í í í í í í í í í í í í í í í í í	ii
LIST OF TABLES Í Í Í Í Í Í Í Í Í Í Í Í Í Í Í Í Í Í Í	iii
ABSTRACT í í í í í í í í í í í í í í í í í í í	iv
INTRODUCTION Í Í Í Í Í Í Í Í Í Í Í Í Í Í Í Í Í Í Í	1
1.1Back Ground of the Studyíííííííííííííííííííííííííííííííííííí	1
1.2 Statement of the Problems í í í í í í í í í í í í í í í í í í í	3
1.3 Research Questions í í í í í í í í í í í í í í í í í í í	4
1.4 Objectives of the Studyí í í í í í í í í í í í í í í í í í í	5
1.4.1 The General Objective of the Study í í í í í í í í í í í í í	5
1.4.2 Specific Objectives of the Study í í í í í í í í í í í í í í í í í í í	5
1.5 Significance of the Study í í í í í í í í í í í í í í í í í í í	5
1.6 Scope of the Study í í í í í í í í í í í í í í í í í í í	5
1.7 Limitation of the Study í í í í í í í í í í í í í í í í í í í	6
1.8 Organization of the Paperíííííííííííííííííííííí	6
LITRATURE REVIEW í í í í í í í í í í í í í í í í í í í	7
2.1 General Concepts and Definitions í í í í í í í í í í í í í í í í í í í	7
2.1.1 Social Security í í í í í í í í í í í í í í í í í í í	7
2.1.2 Pension Funds í í í í í í í í í í í í í í í í í í í	8
2.1.3 Types of Pension Plans í í í í í í í í í í í í í í í í í í í	8
2.2 Review of Basic Issus Concerning Pension Fund Investment í í í í	9
2.2.1 Investments of Pension Funds í í í í í í í í í í í í í í í í í í í	9
2.2.2 Principles of Pension Fund Investment í í í í í í í í í í í í í	10
2.2.3 Governance of Social Security Funds í í í í í í í í í í í í í í	14
2.2.4 Investment Policy and Pension Funds í í í í í í í í í í í í í	15
2.2.5 Investment Objectives and Strategies for the Plans í í í í í í	16
2.2.6 Investment Regulations of Pension Fund í í í í í í í í í í í	17

	2.2.7 Risk Management Policy í í í í í í í í í í í í í í í í í í	18
	2.3 Review of Related Empirical Literature í í í í í í í í í í í í í	19
	2.3.1 Practice of Pension Fund Management in Advanced Economies	19
	2.3.2 Practice of Pension Fund Management in Emerging Economies	20
	2.3.3 Practice of Pension Fund in Developing Countries í í í í í í	21
	2.3.4 Social Security Agencyøs Investment Policy, Guidelines and	
	Practice in Ethiopiaííííííííííííííííííííííííííííííííííí	22
	2.4 Studies of Pension Fund Investment in Ethiopia í í í í í í í í í í	24
III	RESEARCH DESIGN AND METHODOLOGY í í í í í í í í í í .	25
	3.1 Research Designíííííííííííííííííííííííííííííííí	25
	3.2 Population and Sampling Techniques í í í í í í í í í í í í í í í í í	25
	3.3 Source and Tools/ Instruments of Data Collection í í í í í í í í í í í	26
	3.4 Procedures of Data Collection í í í í í í í í í í í í í í í í í í	26
	3.5 Method of Data Analysis í í í í í í í í í í í í í í í í í í	27
IV	RESULTS AND DISCUSSIONS í í í í í í í í í í í í í í í í í í	28
	4.1 Pension System as Part of Social Security in Ethiopia í í í í í í í	28
	4.1.1 Public Servants Social Security Agency (PSSSA) í í í í í í í	28
	4.1.2 Private Organizations Employees Social Security Agency í í í	28
	4.2 Analysis and Findings of the Study í í í í í í í í í í í í í í í í	29
	4.2.1 Characteristics of the Respondents í í í í í í í í í í í í í í í	29
	4.2.2 Existing Investment Opportunities of PSSSA and POESSA í $$ í .	31
	4.2.3 Unutilized Pension Fund Investment Opportunities of PSSSA and	
	POESSAÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ	33
	4.3 Effects restrictions imposed on Pension Fund in Profitable Investment	
	Opportunities on the Long Run Sufficiency of The Fund í í í	35
	4.3.1 Investment Return and Overall Performance í í í í í í í í í í	35
	4.3.2 Source of Finance and Pension Payment í í í í í í í í í í í	37
	4.3.3 The Extent to which the Fund is Losing its Profitability í í í í	39
	4.4 Challenges of Managing Investment of Pension Fund í í í í í í …	41
	4.4.1 Legal Basis for Investment Activities of Pension Fund í í í í .	41

	4.4.2 Efforts Made to Improve Investment Activities of the	
	Organizations í í í í í í í í í í í í í í í í í í í	43
	4.4.3 Challenges of the Social Security Fund Investment in Relation to	
	Administrative Issues í í í í í í í í í í í í í í í í í í í	44
V	CONCLUSIONS AND RECOMMENDATIONS í í í í í í í í í í	51
	5.1 Conclusions í í í í í í í í í í í í í í í í í í í	51
	5.2 Recommendations í í í í í í í í í í í í í í í í í í í	53
	REFERENCES í í í í í í í í í í í í í í í í í í í	54
	APPENDICES i i i i i i i i i i i i i i i i i i i	59

ACKNOWLEDGMENTS

First of all, my heartfelt gratitude and respect goes towards Almighty God for everything he did for me through my life in granting me the strength, wisdom, knowledge and the courage needed throughout the period of study. Next I would like to extend my deep indebtedness to my advisor Simon Tarekegn (Asst. Pro.), for his invaluable comments, encouragements and guidance at various stage of the study. I would like to thank also investment and fund management directorate staffs and management team members of both PSSSA and POESSA for their unreserved support to provide data for the study unless and otherwise it would not have completed especially. Finally, I would also like to express my deepest gratitude to my beloved wife, W/ro Betelhem Asfaw, for her support in creating conducive environment and moral support during attending my post graduate study and towards the completion of this paper in particular.

ABBREVATIONS AND ACRONYMS

- CSA Central Static Agency
- DB Defined Benefits
- DBE Development Bank of Ethiopia
- DC Defined Contributions
- GDP Gross Domestic Product
- ILO International Labor Organizations
- ISSA International Social Security Association
- MoFEC Ministry of Finance and Economic Cooperation
- MoLSA Ministry of Labor and Social Affairs
- NGOs None Government Organizations
- OECD Organization for Economic Cooperation and Development
- PAYGO Pay-As-You-Go
- POESSA Privet Organizations Employee Social Security Agency
- PSSA Pension and Social Security Authority
- PSSSA Public Servants Social Security Agency
- SPSS Statistical Packages for Social Science
- SSA Social Security Authority
- SSI Social Security Institutions
- SSS Social Security Systems

LIST OF TABLES

	TITLE	PAGE
Table 4.1	Characteristics of Respondents í í í í í í í í í í í í í í í í í í í	30
Table 4.2	Portfolio Mix of Asset Invested by PSSSAíííííííííííííííííííí	32
Table 4.3	Portfolio Mix of Assets Invested by POESSAí í í í í í í í í í í í í í í	32
Table 4.4	Respondents Opinion Regarding Unutilized Pension Fund Investment	
	Opportunities í í í í í í í í í í í í í í í í í í í	35
Table 4.5	PSSSAøs Level of Performance Based on Nominal and Real Rate of	
	Interest í í í í í í í í í í í í í í í í í í í	36
Table 4.6	POESSAøs Level of Performance Based on Nominal and Real Rate of	
	Interest í í í í í í í í í í í í í í í í í í í	37
Table 4.7	PSSSAøs Growth of Pension Fund Contribution, Return from Investment	
	and Pension Paymentííííííííííííííííííííííííííííííí	38
Table 4.8	The Difference if the Fund had been Invested on Time Deposit í í í í í .	39
Table 4.9	Respondents Opinion Regarding the Probability of Insufficiency of the	
	Fundí í í í í í í í í í í í í í í í í í í	41
Table 4.10	Basis for Investment of the Fund í í í í í í í í í í í í í í í í í í í	42
Table 4.11	Asset Allocation Strategies (Investment Portfolio Mix) of PSSSA í $$ í $$ í $$.	43
Table 4.12	Challenges of the Social Security Fund Investment in Relation to	
	Administrative Issues í í í í í í í í í í í í í í í í í í í	45
Table 4.13	Internal Challenges of Pension Fund Investment í í í í í í í í í í í	46

ABSTRACT

The present research attempts to assess Social Security Fund Investment Practice and Challenges in Ethiopia: The case of Social Security Agency, mainly in the two pension fund administering organizations PSSSA and POESSA. The primary data were collected from twelve interviewees purposely selected from the two organizations based on their relation to investment activities of the organizations and structured questionnaire were also prepared for twenty eight management team members of both organizations to gather information about management issues concerning pension fund investment. These were supplemented by secondary data. The researcher used descriptive research design and mixed approach both quantitative and qualitative data analysis techniques. The study result shows that there are internal and external challenges of managing the investment of pension fund. Internally, there is lack of a statement of investment principles to guide their investment decisions and monitor their investment and fund management staffs. Trustees lack of competencies to manage pension fund investments. Externally, the current regulatory system is restrictive in that it prohibits pension funds to invest in different investment portfolios other than Treasury Bills. It also limits the organizations mandate from investing in profitable situations and currently the fund is totally used to cover government expenditures. This implies that there is a very high government intervention. Therefore, recommendations were made to consider the improvement of the proclamation for policy makers and adjustments of internal challenges for the board, high officials and also for the investment and fund management directorate itself for better usage of the fund in the long run.

Keywords: Investment and fund management, Management team members, Pension fund, pension fund investment, POESSA, PSSSA, Social Security Fund.

CHAPTER ONE INTRODUCTION

This chapter presents an overview of the entire study. It includes background of the study, statement of the problem, objective of the study, research questions, and operational definition, significance of the study, scope of the study and organization of the research report.

1.1 Background of the Study

Societies at all levels recognize the need to establish systems which will ensure loss of income in the event of contingencies such as incapacity, old age, unemployment and the death of an employed person. They also recognize the need to ensure access to adequate and affordable health care. For many, these needs are met within the framework of their employment conditions. This is enhanced when the social and working environment also promotes social justice, human dignity and solidarity (ISSA, 2012).

However, for the majority of workers in developing countries, decent work conditions are difficult both to attain and to sustain, particularly for those who work in the informal economy in countries where social, economic and political development is still at an early stage, or has been disrupted. Thus perhaps half of the world population is still excluded from any type of social security system and here, in Sub-Saharan Africa, less than 10% of the population in some countries is adequately covered. Africa faces a two edged sword: on one side a broad range of risks which threaten security, living conditions, incomes and health and, on the other side, a lack of resources and skills available to combat these risks.(Ibid).

A huge increase in life expectancy is one of the great achievements of the human race over the past two centuries (Truell, 2011). Despite this fact, inability to work is beyond control of the individuals. Injury or other sickness may occur despite precaution and the weakness resulting from old age is a natural event. Hence, a person may lose his means of income when he is unable to work. During this time the dependents will face harsh living conditions since their means of survival has come to an end. This problem brings the origin of social security (Ambachtseer, 2001).

Social Security Systems (SSS) provide a means for citizens to secure their life in their retirement period. In such systems, working people are required to make pension contributions while they are active employees. This system distributes gives Social Security Institutions (SSI) the responsibility for collecting and depositing money into the pension fund, administering the fund and distributing benefits. Usually, institutions which are responsible for pooling of the fund also invest the fund in manner that will give return (ILO, 2009).

Pension funds may be defined as forms of institutional investors, which collect, pool, and invest funds contributed by sponsors and beneficiaries to provide for the future pension entitlements of beneficiaries (Davis, 1995a). They thus provide means for individuals to accumulate saving over their working life so as to finance their consumption needs in retirement, either by means of a lump sum or by provision of an annuity, while also supplying funds to end-users such as corporations, other households via secured loans or government for investment or consumption (Davis, 2001).

Apart from this, the social securities are part of the financial sector of the economy and play a significant role in economic building. In performing financial intermediation function of asset transformation, pensions funds are generally intended to fulfill and provide the public with two primary functions: to furnish a saving mechanism and to alleviate poverty among old through provision of income payments on retirement so as to make consumption flow smooth. From this argument we can say pension is a major element in reducing risk for the working poor. (Alemu, 2015)

Regardless of this immense contribution to the society, like many other developing countries of the world, safety nets, pension systems, and public transfers are not adequately developed in Ethiopia. Until July 1998, MoFEC had been collecting the contributions made by the employees of the public servants and the military. Starting from August 1998, this execution is transferred to the right Agency, i.e., Social Security Agency. This shows the age-old problem of fund administration in the field. Like other financial institutions, Pension system is one of the strategically important areas in the state policy, and therefore requires ongoing control through an authorized body to ensure their soundness and safeguard the interest of affiliate workers. Such a body shall be responsible for regulation and control over the activities of the pension funds, including investment activity. (Ibid)

The focus of this study is to assess the social security fund investment practice and challenges of both Public Servants Social Security Agency (PSSSA) and Private Organizations Employees Social Security Agency (POESSA).

1.2 Statement of the Problems

Excellence in social security administration is a key objective for social security institutions and a condition for the success of social security programs and policies. Reserve funds have always played an important role in the financial management and supported sustainability of social security systems. Whilst few systems are fully funded, the majority of systems manage investment assets to meet their cash flow obligations arising in the short and medium term. Assets under management can be significant depending on the objectives of such funds and there is increasing scrutiny regarding their performance and management. The ageing of the population, a low interest rate environment, a more complex external environment and increasing constraints on management mean that a well-organized and effective investment process is more essential than ever for social security institutions. The ISSA Guidelines on Investment of Social Security Funds support social security institutions in this process. (ISSA, 2017)

According to Urwin R.(2012), there is increasing evidence to support a link between superior investment performance and an institutional investors strong management. He added that, many pension funds are beginning to realize that their management arrangement should be a top priority, not only through responsibility to literally billions of individuals, but also because it creates an opportunity for wealth creation. The management of pension fund should include all the receipt and payments including investment and return from investment. This needs proper management and much coordination among the concerned parties. But those things are not an easy task in developing countries like Ethiopia which easily can be seen from current Ethiopian situation.

For a long time Ethiopian social security agency has an aim to collect and accumulate money to effect a payment for old age and invests the remaining balance in appropriate investment options. Regardless of this intention, funds have been simply gotten without adequately generating additional income and to keep it in their bank account. This less development of pension fund in Ethiopia is exacerbated by an increase in inflation, coupled with poor management of pension

funds, which has reduced the investment of pension funds. The pension funds now face significant funding gaps and are forced to increase premiums (as witnessed currently) and if the funding gap does not recover in time, they may have to cut a pension right which is not possible in reality. Evidently, the improper management has profound implications and raised questions as to the quality and sophistication of pension fund investment management (Assaminew, 2010).

This shows that investing the social security fund in adequately profitable areas is mandatory and since the Ethiopian pension fund investment is restricted by the proclamation to be invested only on the investment opportunities forwarded by Ministry of Finance and Economic Development, currently Ministry of Finance and Economic Cooperation which yields very low return, there is a gap which could lead the fund be inadequate to pay pensioners in the long run. So, there is a need to recognize and employ the unutilized pension fund investment opportunities by identifying their risks and also ascertaining proper way of management through assessing the challenges of managing the investment and put proper ways of overcoming these challenges to insure the long run usage of social security fund in Ethiopia. This indicates that the management of pension fund investment is exercising certain challenges. Hence, the challenges facing the investment of the social security fund need to be investigated through independent research. Therefore this study is aimed to assess the social security fund investment practice and challenges in Ethiopia: the case of social security agency.

1.3 Research Questions

- 1. What are the existing unutilized pension fund investment opportunities in Ethiopia?
- 2. How restrictions imposed on the pension fund in profitable investment opportunities affect the long run sufficiency of the fund?
- 3. How is the pension fund investment administered?
- 4. Does the agency have a pension fund investment policy and guidelines?
- 5. What are the challenges of managing the investment of reserved fund?

1.4 Objectives of the Study

1.4.1 The General Objective of the Study

The general objective of the study is to assess social security fund investment practice and challenges in Ethiopia: The case of social security agency.

1.4.2 Specific Objectives of the Study

- 1. To assess the existing unutilized pension fund investment opportunities in Ethiopia.
- 2. To show to what extent restrictions imposed on the pension fund in profitable investment opportunities affect the long run sufficiency of the fund.
- 3. To assess the pension fund investment administration.
- 4. To assess the agency pension fund policy and guidelines.
- 5. To identify the challenges of managing investment of reserved pension fund.

1.5 Significance of the Study

Thorough investigations of Ethiopian social security pension fund investment practice and challenges of management practices do have a vast value in helping the institution and government to build up on their strengths and to take measures on their weakness. In addition to this, the finding will provide guide lines for strategy and policy formulation aim at improving the operational conditions of pension fund investment management. Again this study will adds to the existing literature in several ways in that it is only recently that attention paid to pension fund investment management in Ethiopia. Last but not least, the knowledge of the pension fund investment management will be a base for those who have currently expect to apply the system of pension for their employees like NGO¢s and private organizations.

1.6 Scope of the Study

Investment of pension fund and management of the investment in order to be profitable in the market will have a significant role in the socio- economic development of the country and in insuring pensioners for sustainable period of time. The assessment on social security fund investment practice and challenges related to the social security fund investment ought to be included in this study in accordance with the objectives and significant of the study.

Therefore, the study was focused on the social security fund investment practice and challenges focusing on PSSSA and POESSA.

1.7 Limitation of the study

The analysis of primary data was based on questioners and interviews results from key informants and the responses may be subject to personal biases and subjectivity which may affect the reliability of the study. A time constraints, and research experience was also the main limitation of this study.

1.8 Organization of the Paper

To successfully address the objective, this study organized in five chapters. The first chapter introduces the background of the study, the rationale behind the study, the objectives, significance and scope of the study. The second chapter addresses the detail review of theoretical and empirical literatures on pension fund investment and related issues including some other countries experience. The third chapter presents the research methodology used to conduct the study. The fourth chapter is dedicated to the detail analysis of the data collected for the study. Finally, the last chapter presented conclusions draws from analysis and possible recommendations for the identified challenges.

CHAPTER TWO

LITRATURE REVIEW

This chapter addresses the review of different literatures written around the general concepts and definitions of social security, pension fund and pension plans. It also includes review of basic issues related to pension fund investment, Governance of Social security funds, Investment policy, Investment regulations, risk management policy of pension fund investment and the practices of pension fund investment of other countries and empirical researches done related to the issue.

2.1 General Concepts and Definitions

2.1.1 Social Security

Social security is the protection that a society provides to individuals and households to ensure access to healthcare and to guarantee income security, particularly in cases of old age, unemployment, sickness, invalidity, work injury, maternity or loss of a breadwinner (ILO, 1997).

Systems of socio-economic security were introduced in Europe in the late 19th century. These were slowly implemented in most countries during the early 20th century and consolidated after the Second World War. These programmers were established as a means of improving the wellbeing of the poor, reduce inequality within society and conciliate different social demands, thus avoiding the social and political conflicts, which necessarily arose as capitalist forms of production evolved in the industrialized countries. Two of the most influential examples were the United Statesø 1935 Social Security Act and the social security programme implemented in the UK, summarized in the 1942 Beveridge Report. These programmers established the basis for modern forms of social security, defined by the International Labor Organization (ILO) as õthe protection which society provides for its members through a series of public measures against the economic and social distress that otherwise would be caused by the stoppage or substantial reduction of earnings resulting from sickness, maternity, employment injury, invalidity and death; the provision of medical care; and the provision of subsidies for families with childrenö (ILO, 1984).

2.1.2 Pension Funds

The dictionary definition of pension is õmoney that is paid regularly by a government or company to somebody who has stopped working because of old age or who cannot work because they are illö. And Fund can be defined as õsum of money that is collected for a particular purpose.ö So, we can define pension fund as sum of money collected by the government or a company for the purpose of repaying to those who has stopped working because of old age or who cannot work because they are ill. As can be understood from the above definition, the pension funds can be collected and managed by the government (publicly managed pension funds) or by a private company (privately managed funds). Sometimes hybrid pensions are also existed. Pension funds are collected at the early age (working age) of employees and will be repaid at retirement age. Hence, those who are responsible to manage the pension fund have long-term liability-they collect early and paid later. This gives chance for investing these pension funds. According to a report by international Labor Organization (ILO, 1997), effectively managed pension funds can have a considerable influence on the national economy and national capital market.

2.1.3 Types of Pension Plans

Pension System can be broadly categorized as defined benefit (DB) and defined contribution (DC) by the benefits they promise and PAYGO and funded based on the way they finance that promise. (Kennedy, 2015)

2.1.3.1 Defined Benefit (DB)

In DB plans pension payments are based on a specific pension-crediting formula and years of service. As described by Modigliani and Muralidhar (2005), the essence of a DB pension plan is that it provides a õdefined benefitö a pre specified annuity either in absolute currency or as a fraction of a measure of salary (for example, a defined percentage of the final salary or an average of some past years of salary). The planø sponsor (government) is responsible for ensuring that the fund assets are sufficient to provide for current and potential liabilities.

2.1.3.2 Defined Contribution (DC)

In DC plans participants, sponsors, or both make prespecified contributions and Participants invest contributions in assets. The final pension is uncertain (prior to retirement) because it depends entirely on asset performance of the accumulated contributions (Ibid). The retirement incomes of beneficiaries are determined by investment earning.

2.1.3.3 Pay-as-you-go (PAYGO) Principle

In PAYGO plans, the retirement pensions paid out over a given period are financed from the contributions paid over that same period by those in employment (employees and employers). According to Modigliani and Muralidhar (2005), in a pure PAYGO, there is no accumulation of funds because all contributions are disbursed to service pensions. However, funding requires an accumulation of funds before retirement to service future liabilities. Funds are invested in either marketable or nonmarketable assets.

2.1.3.4 Funded Principle

In funded pension plans, the contributions are paid into a fund from which capital and interest accrued are then used to pay out pensions (Abebe, 2003).Unlike PAYGO plans, funded plans have a potential to accumulate resources that can be invested.

2.2 Review of Basic Issues Concerning Pension Fund Investment

2.2.1 Investments of Pension Funds

Pension funds invest in capital markets to make profit. The need for a lasting future economic recovery makes it appropriate for most pension funds to invest for the long term. In many countries, pension fund resources serve as the domestic source of long term capital. Initially the pension funds are channeled into safe investment areas. õAs the funds mature some turn towards alternative investment vehicles, which in general have had better returns than pension fund portfolios, albeit with greater riskö (Vives, 1999:27).

2.2.2 Principles of Pension Fund Investment

According to International Social Security Association ISSA (2005), social security funds are held by social security schemes in order to safeguard the schemeøs ability to pay benefits and provide services to generate investment income that helps to finance benefits and services and in many instances, to ease transitory demographic pressures. In 2005, International Social Security Association (ISSA) provides social security funds investment guidelines that any social security fund should follow by adopting it with their specific situation. Within the document guidelines related to governance prerequisites, governance structure, governance mechanisms and largely investment of social security pension funds are outlined.

Pension funds are among the largest institutional investors that contribute badly to a nationøs economy. Because their reserves are a considerable amount, even may reach up to 50% of a countryøs GDP (i.e. Canada, Chile, Ireland, South Africa). So, investment of this tremendous amount of fund is as important as to the national economy by reducing unemployment, increasing GDP, improves living standard of the old-aged people and so on. As written by the international labor organization (ILO, 1997), it must not be forgotten that these funds represent property of others, that is of the insured persons and their dependents. As a result, the management of the funds has to be handled according to certain well defined principles and considerations.

Key Principles

There has been a number of underlying investment principles which have guided the evolution of the Pension Fund Structure. These principles will be as important in the future as they have been in the past. According to Fund (2013) the key principles are as follows:

Long-term perspective - by the nature of its liabilities and sponsor covenants, the Fund is able to take a long-term view and position its investment strategy accordingly.

Diversification - the Fund seeks to diversify its investments in order to benefit from a variety of return patterns. Diversification is a risk management technique that mixes a wide variety of investments within a portfolio. The rationale behind this technique contends that a portfolio constructed of different kinds of investments will, on average, yield higher returns

and pose a lower risk than any individual investment found within the portfolio. (investopedia.com). According to Paul C. (2012) õDiversification is a technique that reduces risk by allocating investments among various financial instruments, industries and other categories. It aims to maximize return by investing in different areas that would each react differently to the same event.ö In finance, diversification is the process of allocating capital in a way that reduces the exposure to any one particular asset or risk. A common path towards diversification is to reduce risk or volatility by investing in a variety of assets. If asset prices do not change in perfect synchrony, a diversified portfolio will have less variance than the weighted average variance of its constituent assets, and often less volatility than the least volatile of its constituents. (Russell, 2014)

Efficiency - the fund aims to achieve an efficient balance between investment risk and reward. *Competitive advantage* ó the fundøs size, time-perspective and risk appetite give it some competitive advantages which it seeks to exploit.

Pragmatism - the fund recognizes that there are implementation considerations including cost and manageability which may lead it to favor practical investment solutions over optimized model structures.

As we can understand from the above principles of pension fund investment, it sincerely approves the need to invest the fund in long term and diversified investment opportunities to benefit from verity of returns by balancing investment risks and rewords. Therefore investing the pension fund in profitable investment opportunities is supported by international social security fund investment principles.

There is also another view about the basic principles of investment. According to Cichon, (2002) it stresses on four basic principles that should govern the investment of social security funds. The first three are the same as those related to other fiduciary institutions which are Safety, Yield (return), and Liquidity. However, once these basic conditions have been met, another factor should also be considered, reflecting the responsibilities and importance of social protection scheme in the national economy that is social and economic utility.

Safety - is the overriding requirement for social security system because the system administers a trust fund and the responsible government bodies are trusted with the management of other

peoples money. That is why strict rules have to be observed regarding the safety and control of investments. (Ibid)

According to Russell J. (2014), perhaps there is truth to the axiom that there is no such thing as a completely safe and secure investment. Yet we can get close to ultimate safety for our investment funds through the purchase of government-issued securities in stable economic systems, or through the purchase of the highest quality corporate bonds issued by the economy's top companies. Such securities are arguably the best means of preserving principal while receiving a specified rate of return. The safest investments are usually found in the money market. which includes such securities as Treasury bills (T-bills), certificates of deposit (CD), commercial paper or bankers' acceptance slips, or in the fixed income (bond) market in the form of municipal and other government bonds, and in corporate bonds. The securities listed above are ordered according to the typical spectrum of increasing risk and, in turn, increasing potential yield. To compensate for their higher risk, corporate bonds return a greater yield than T-bills.

It is important to realize that there's an enormous range of relative risk within the bond market. At one end are government and high-grade corporate bonds, which are considered some of the safest investments around; at the other end are junk bonds, which have a lower investment grade and may have more risk than some of the more speculative stocks. In other words, it's incorrect to think that corporate bonds are always safe, but most instruments from the money market can be considered very safe. (Ibid)

Yield- is also essential because it should govern the choice of comparable assets in which to invest the social security trust fund. But the yield cannot have a great influence on the schemes financial equilibrium. Therefore it is not necessary for the investment of the contingency reserve to seek investment with the highest yield as a principal consideration. On the other hand, as far as the technical reserves of a pension insurance scheme are concerned, yield is of fundamental importance. Actuarial calculations are based on the long term interest rate because of that the investment of technical reserve must earn interest at least corresponding to the technical rate of interest or otherwise the scheme will have to face an actuarial deficit. (Cichon, 2002)

The yield is the income return on an investment, such as the interest or dividends received from holding a particular security. The yield is usually expressed as an annual percentage rate based on the investment's cost, current market value or face value. Yields may be considered known or anticipated depending on the security in question as certain securities may experience fluctuations in value. (investopedia.com)

In finance, the yield on a security is the amount of cash (in percentage terms) that returns to the owners of the security, in the form of interest or dividends received from it. Normally, it does not include the price variations, distinguishing it from the total return. Yield applies to various stated rates of return on stocks (common and preferred, and convertible), fixed income instruments (bonds, notes, bills, strips, zero coupon), and some other investment type insurance products (e.g. annuities). The term is used in different situations to mean different things. (Paul, 2012)

Liquidity - Social security funds heavily depend on the liquidity of the assets held in investment. Because the contingency reserves of short-term benefits scheme should be placed in liquid investments that are easily convertible in to cash were as the technical reserve of pension scheme primarily intended to earn Interest and do not require a high degree of liquidity. (Cichon, 2002)

Liquidity describes the degree to which an asset or security can be quickly bought or sold in the market without affecting the asset's price. Market liquidity refers to the extent to which a market, such as a country's stock market or a city's real estate market, allows assets to be bought and sold at stable prices. Cash is the most liquid asset. Accounting liquidity measures the ease with which an individual or company can meet their financial obligations with the liquid assets available to them. (investopedia.com)

For an entity, such as a person or a company, accounting liquidity is a measure of their ability to pay off debts as they come due, that is, to have access to their money when they need it. In practical terms, assessing accounting liquidity means comparing liquid assets to current liabilities, or financial obligations that come due within one year. (Russell, 2014)

Social and Economic Utility - if the conditions of Safety, yield and liquidity are fulfilled the economic and social utility of the investment should be taken in to account in an investment policy of a country. Because it is the most important goal of social protection scheme to invest the fund in a way that it directly or indirectly contribute to improvement of the insured personøs life. Therefore, investment should be easy to manage and it is important to not divert management of the fund from social securityøs primary objective that is effective provision of benefits. (Cichon, 2002)

2.2.3 Governance of Social Security Funds

Ensuring good governance of pension funds is essential to meet their goal of financing public pension systems. Given the size of the funds in many countries, their governance has also major implications for the behavior of the financial system. A particular concern in the governance of pension funds is how to ensure sufficient independence from undue political interference.(Juan, 2008)

Pension funds require a governance structure that ensures an appropriate division of operational and oversight responsibilities, and the suitability and accountability of those with such responsibilities. This basic principle of governance is preserved in both the OECD¢s õGuidelines on Pension Fund Governanceö and ISSA¢s õGuidelines for the Investment of Social Security Fundsö. (Ibid)

Both sets of guidelines contain similar criteria to implement this objective. At the center of the governance structure is a governing body that has ultimate responsibility for the fund and is accountable to its beneficiaries. The members of this body must have clear fiduciary duties and a specific, measurable mandate, and must possess relevant expertise to be able to carry out their functions.(Ibid)

The governing body may be a government ministry, the board of the social security institution or the board of an entity established expressly for the purpose of investing the schemeøs funds. The latter, segregated set-up may be preferable as a protection against political interference, especially if a government ministry is responsible for administering the social security scheme. The governing body is usually assisted by an investment committee which advises on the investment strategy, and an executive that is in charge of operational management, including asset management. Asset management may also be delegated externally, but the governing body should retain the fiduciary responsibility for the fund. Where the governing body does not possess sufficient knowledge to discharge its duties, it should also seek external advice.(Ibid)

The governance structure of the pension funds should normally include three other bodies. An independent auditor should be appointed to carry out an annual audit of the fund. In the case of funds that are integrated in the social security institution, an actuary would also need to be appointed to carry out the actuarial valuations of the system and analyze the implications of different investment strategies for the systemøs financing. In most instances, it is also a good practice to appoint a custodian who is in charge of the safekeeping of the assets.(Ibid)

2.2.4 Investment Policy of Pension Funds

Parties responsible for the investment management of pension assets should establish an investment policy and describe it in a written statement. This should be required regardless of whether the investment regulations use the prudent person standard, portfolio limits or some combination of the two. An investment policy should be established regardless of plan type, whether defined benefit or defined contribution. As noted in the guidelines, pension programmes that include member direction may be required to address additional or different issues in their investment policies. Similarly, the investment policies of defined benefit plans may differ from those of defined contribution plans. In particular, the relationship between actuarial determinations, funding obligations and investment management is significantly more complex for defined benefit plans, and the relationship should be adequately considered in an investment policy. (OECD, 2006)

The investment policy should establish clearly the financial objectives of the pension fund and the manner in which those objectives will be achieved. The investment objectives should be consistent with the retirement income objective of the pension funds, and therefore, with the fundøs liabilities. They should also satisfy the relevant legal provisions (prudent person standard and portfolio limits), and more generally, the principles of diversification, and matching of assets and liabilities (maturity, duration, currency, etc). (Ibid)

The investment policy should take into consideration the short and long term obligations of the pension fund, including any necessary funding and actuarial matters that may impact on those obligations. Short term obligations include the obligation to pay benefits to those in or who will enter pay status (retirement); salaries, administrative costs and fees that are to be paid by the pension plan from pension fund assets; and anticipated costs arising from portability provisions that might apply to the plan.(Ibid)

Assets should be valued in accordance with generally accepted accounting principles. And periodic analysis of each asset class and the portfolio as a whole should be carried out to determine nominal, risk-adjusted, and inflation-adjusted (real) rates of return. The analysis of investments should be publicly disclosed.

2.2.5 Investment Objective and Strategies for the Plans

With regard to investment objective, several studies emphasize that ,DC pension fund should in principle required to maximize expected return for a given risk, so as to attain as high as possible replacement ratio at retirement, since returns to members of pension plans backed by such funds may be purely dependent on the market. However, according to Davis (2002b) for both DB and DC funds, the portfolio distribution and the corresponding return and risk on the assets seek to match or preferably exceed the growth of average labor earnings.

This will maximize the replacement ratio (pension as a proportion of final earnings) obtainable by purchase of an annuity at retirement financed via an occupational or personal DC fund, and reduce the cost to a company of providing a given pension in a defined benefit plan.

Davis 2002, argues that appropriate investment strategies will depend on the nature of the liabilities, including whether pensions in payment are indexed and the demographic structure of the workforce. Investment strategies will also be influenced by the minimum-funding rules imposed by the authorities which determine the size of surplus assets, as well as accounting conventions affecting the way shortfalls are presented in annual reports. As to the investment strategies for DB plans, (Blake, 2007a) suggested that a strategy considering both assets and liabilities is more appropriate.

2.2.6 Investment Regulations of Pension Fund

Pension investment regulations are meant to ensure that pension funds adopt appropriate diversification strategies and minimize agency, systemic and portfolio risks (Kyiv, 2003). Kyiv also argues that the regulations should spell out the ceilings beyond which pension funds should not invest in any specific category or class of investments to enhance financial efficiency.

Pension funds in unrestricted investment environments generate more returns than those operating in the restricted environments (Quigler, 2006). The failure to restrict pension fund investments results in the application of the prudent man principle and thus concentrates on high return assets as opposed to the low return assets. In addition, investment restriction minimizes creativity and tends to focus more on the long-term objectives at the expense of the short-term ones (OECD, 2009c). A disclaimer is however that the high returns are obtained in the context of high risk.

Pension fund investments can be controlled through asset class (ceiling on the proportion of specific classes in a pension fundøs portfolio), concentration of ownership (ceiling on the proportion of shares of a company that a pension fund can hold), by issuer (ceiling on the proportion of assets in a fundøs portfolio issued by the same institution), by security (ceiling on the proportion of individual securities in a fundøs portfolio) and by risk (minimum acceptable risk rating of securities). Investment regulation is therefore done to balance the investment risks and returns (Srivanis, 2000).

It is furthermore, important to control offshore investments as many pension fund managers are not well experienced to take external risks, capital markets in the international environment are reducing liquidity as a result of the global economic meltdown, they involve huge risks and the transaction costs involved are high (OECD 2009c). OECD therefore suggests a restriction on international investments to ensure a fair equilibrium between pension fund risks and returns at lower costs. Kyiv (2003) however identifies three adverse effects of asset allocation regulations. They include the creation of systematic market risk implying that higher returns can only be achieved if one takes more risk; pension funds ending up controlling large shares of markets in which they invest make the markets less liquid and the development of capital markets are being hindered. Kyiv (2003) thus advocates for careful investment restrictions that lead to pension fund growth without taking undue risk.

2.2.7 Risk Management Policy

Pension funds play a crucial role in providing risk control to households by ensuring that their retirement income is safeguarded (Davis, 2000). To be able to provide others with a safety net, pension funds should themselves have appropriate risk management policies that safeguard the replacement rate, investment safety and the time-based risks such as inflation. Moreover, risk management by pension funds should link directly to the portfolio objectives and maintain a balance between assets and liabilities in the context of funding, immunization and the use of derivative securities (Galer, 2009).

Pension funds need to develop a risk management framework to ensure that the investment goals are achieved. Such a framework includes, portfolio diversification aimed at minimizing the overall risk, active portfolio management, asset allocation, tactical asset allocation that ensures an acceptable risk tolerance strategy, research driven investment strategy that results in stock picking and the use of derivative securities to minimize portfolio volatility thus increasing the pension fundøs returns (Amana, 2009).

The effect of risk management policies of pension funds on pension fund efficiency is also investigated.

2.2.7.1 Risk and Return

Investments are made with the anticipation of earning some returns. However, investors face variability in their capital gains and dividends as companies encounter variability in their project cash flows. To earn the return, the investor must accept the possibility of loss. Generally, all decisions involving investment takes into account a trade-off between risk and return. Investments differ widely in their risk and return characteristics. Return and risk are positively

related; the higher the return, the higher the risk. Therefore, investors cannot expect higher returns without being willing to assume larger risks. With the assumption that all investors are rational, minimizing the risk they face for a given return will be their aim. According to Haslem (2003), the trade-off relationship between risk and expected return is an upward positively sloped straight line. In the interest of investors to make sound investment decisions, it is important to evaluate the return and risk of various investment alternatives. The concept of risk and return provides a convenient way of expressing the financial performance of an investment.

2.3 Review of Related Empirical Literature

Pension fund management requires the investment of assets to achieve the long-term provision of funding for retirement (Urwin R, 2012). Institutional social security, in some measures or other, exists in almost all countries today. However, there is much variation between countries with regard to the levels of protection, scope, coverage and effectiveness of the system in place. As a group, the developed countries have the most advanced social security and pension fund management systems. With very few exceptions, institutionalized social security and pension fund management in the developing world is of relatively recent origin having appeared only after the Second World War, following the emergence of several independent states at the end of the colonial era (Catala, 2004).

2.3.1 Practice of Pension Fund Management in Advanced Economies

According to Preqin (2011), public pension funds are important and experienced investors in alternatives and on average allocate 5.5% of their capital to private equity, with significant commitments also existing to hedge funds, private real estate and infrastructure. He examined the financial statements of over 150 public pension funds from North America, Europe and the UK to ascertain how well their investments across various asset classes were performing. His data shows that the 20 largest public pension funds have a total of \$224 billion allocated to private equity, and their high levels of assets under management make fund managers keen to attract this type of investor. The long term, high risk nature of alternatives are well matched to long term liabilities of pension plans, providing diversity to investment portfolios, and giving potential to yield high returns (Philip, 2002).

2.3.2 Practice of Pension Fund Management in Emerging Economies

According to Ventura (2001), Brazilian pension funds are minority shareholders with no direct involvement in the operations of their investee companies. Thus, they must invest in transparent companies, ones that treat their shareholders fairly and whose management is responsible and renders full account of its administration. This shows that a good quality Corporate Governance contributes to improved company management. When we come to India, Government employees are covered under provident fund and pension fund with a pay as you go system. Pension Funds are managed by Pension Fund Administrators and they are responsible for taking investment decisions but in some jurisdictions, pension fund management can be by asset management and insurance companies and some management decisions may be the responsibility of Boards of Trustees in some corporate organizations. Pension Fund Custodians are those who keep custody of pension funds (Imam, 2011).

China has National social security fund (NSSF). According to Impavido (2009), Fund management has also been centralized (õpooledö in Chinese terminology) as a way to improve standards. The central governmentøs fiscal transfers to nine of these thirteen provinces are managed by the national social security on behalf of the provinces for a period of at least five years and for a guaranteed rate of return. The provinces do not need to pay NSSF the management fee, which is covered by Ministry of Finance (MoF) budget.

The investment activities of the NSSF are mainly governed by two sets of rules: The Interim Measures on the Administration of the Investment of the NSSF contained in the MOLSS and MOF Decree No. 12 of December 2001; and The Interim Provisions Concerning the Administration of Overseas Investment issued by the National Council of the NSSF in March 2006. These two sets of rules provide quantitative investment limits for domestic and foreign investments as well as guidelines for the execution of the strategic asset allocation. (Ibid).

The investment universe in which the NSSF is allowed to invest includes domestic and foreign assets. Domestic assets include: cash, bank deposits, treasury bonds, mutual funds, equities and at least investment grade corporate bonds. Foreign assets include: cash, bank deposits, certificate of deposits (CDs), bonds of foreign governments, bonds of international financial organizations,

bonds of foreign organizations and companies, Chinese bonds issued abroad, equities, mutual funds and financial derivatives traded on organized exchanges.(Ibid)

According to the Interim Measures on the Administration of the Investment of the NSSF, in house asset management is limited to bank deposits and the primary market of government. Any other form of investment needs outsourcing to external asset managers. However, with the approval of the State Council, MOLSS, MOF and other government agencies, the investment universe for in house asset management was recently broadened. For instance, NSSF started implementing its first trust investment programin 2005. Trust investment programs are used by NSSF to invest in infrastructure. In the same year, NSSF was authorized to invest directly in central government enterprises for up to 20 percent of total assets. In 2008, NSSF was allowed to invest in venture capital (Industry funds) and private equity industry funds (Equity funds) registered with the National Development and Reform Commission up to 10 percent of total asset. It is reported that NSSF is seeking approval to invest billions of dollars in foreign private equity funds. (Ibid).

2.3.3 Practice of Pension Fund in Developing Countries

According to Catala (2004) in the last two decades, many developing countries implemented pension reforms from publicly managed pay-as-you-go defined benefit systems to privately managed fully funded defined contribution schemes. One of the potential macroeconomic benefits typically associated with such pension reforms is the development of domestic financial markets. In fully funded pension systems, the argument goes the rapid accumulation of domestic financial assets by pension funds bolsters the domestic bond and stock markets. More developed domestic financial markets, in turn, lead to more efficient allocations of both domestic and foreign savings to productive investments in the domestic economy, which spurs productivity and growth. Pension funds could trade frequently, increasing the liquidity of the domestic stock markets, and thus crowding in savings and new investors. Similarly, the intense trading of stock by pension funds and their large size may induce them to seek the introduction of innovations and new financial instruments to lower transaction costs, again attracting additional savings and new market participants.

In Nigeria, investment of pension fund assets is regulated by PenCom. Part IX of the Pension Reform Act 2004 provides that all contributions by members shall be invested by the Pension Fund Administrators with the objectives of safety and maintenance of fair returns on amount invested. The authorized trading markets under the Act and the investments guidelines issued by PenCom states that pension assets shall be invested in any of the following: Equitiesinvested in ordinary shares of public limited liability companies subject to a maximum portfolio limit of 25%, invested in money market instruments of banks/discount houses as well as the commercial papers of corporate entities subject to a maximum portfolio limit of 35%, invested in Private Equity Funds subject to a maximum portfolio limit of 5%, invested in Private Equity Funds subject to a maximum portfolio limit of 5% of pension assets under management.Pension Fund Assets may be invested in Global Depositary Receipts/Notes and Eurobonds issued by listed Nigerian companies for their operations within Nigeria as certified and approved by SEC,invested in commercial papers of corporate entities provided it is in compliance with the CBNøs guidelines on BAs and CPs. (Ezugwu, 2014)

BondsPension Fund Assets can be invested in FGN or CBN Bond and Securities to a maximum of 80% of pension assets under management. Pension Fund Assets may be invested in bonds issued by State and Local government or State Government Agencies or wholly owned companies, provided that such securities are fully guaranteed by Irrevocable Standing Payment Orders (ISPOs) or external guarantees by eligible banks or development finance institution or MDFOs. (Ibid)

2.3.4 Social Security Agency's Investment Policy, Guidelines and Practices in Ethiopia

The prevailing type of security system in Ethiopia is the government sponsored Social Security system. The history of the formal social security system in Ethiopia dates back to the formulation of the Pension and Social Security Authority (PSSA) in 1963(Public Service Pension, Proclamation No. 209/1963). This decree covered only the military and civil service workers. For these groups, the pension scheme was funded by a mandatory contribution. Since only government employees are covered by the pension scheme, large portion of the eligible age population is used to be excluded. Given this limited coverage, broad-based reduction of old age poverty is not possible. Moreover, the implied saving mobilization role of such financial

institution cannot be realized. When we examine the structure of the labor force in Ethiopia, the majority of the employed population works for either the informal sector, the private sector or are self-employed (Asaminew, 2010). These employees fail to have access to pension services and thus are vulnerable for income instability especially in their old age.

Private organizationsø and NGOøs provide their employees with provident fund which is paid in lamp sum amount at their employment termination. But, as a result of the low interest rates and the rising inflation at the time the lump sum benefits due to retiring beneficiaries were meaningless (Ibid). For this and other reasons, the government of Ethiopia currently included all employees in pension fund net. Conversion of the Provident Fund into a pension payment introduced some element of adequacy into the retirement package for the workers. But, the existence of pension fund by itself is meaningless unless it is properly managed. According to Guidelines for the investment of social security funds (ISSA, 2004), the investment policy of a social security scheme should be based on prudent-person principles and appropriate quantitative restrictions. It should take into account risk management; diversification and dispersion; matching assets and liabilities, including considerations of duration and maturity; currency matching; and performance measurement and monitoring (Exley, 2003).

Whatever principles the investing institution may adopt, there have to be competent and honest managers to apply them. It is, therefore, essential to ensure the competence and integrity of managers. The governing body of the social security scheme or of the investing institution should adopt criteria concerning the expertise that is required of investment managers and other advisers on investment policy and strategy and their implementation.

According to the current FDRE 2011 PSSSA proclamation No.714/2011, POESSA Proclamation No. 715/2011, the social security agency is responsible for administering the pension funds. About utilization of pension funds, the proclamation states that: The pension funds shall be utilized only for effecting payments of benefits stipulated in this Proclamation; investments in treasury bonds and other profitable and reliable investments to be specified by directive to be issued by the MoFEC; and covering the operational expenses of the Agency.
2.4 Studies of Pension Fund Investment in Ethiopia

So far, in Ethiopia, much attention has not been diverted in investigating the challenges of managing investment of social security fund. Although, unpublished Tarekegne (2004), conducted a study on Managing Pension Fund the case of SSA of Ethiopia revealed that the scheme had been investing only on government securities and banks (government banks) which are less risky and have low return. However, he noted that the investment of the authority limited to governmental tools because of the absences of pension fund investment policy designed by SSA and results in inefficient fund management. His study also revealed that it is the government appointee in the board that decides on investment issue of the authority.

Mulualem (2002) studied the Pension Fund Accounting and Managements of Ethiopian SSA. In his finding he discovered that although the authority established as an autonomous public office allowed by proclamation 38/1996 to invest its resources in profitable and reliable investment activities, he found that the authority have been investing its resources in relatively less risky investment namely Government bonds and Treasury bills as well as Fixed time deposit hence earning low return.

There are also other study conducted by Abebe (2003) which was done on the Development of Social Security Practice, Problems and Prospects of Pension Plan in Ethiopia. In his findings indicates that the scheme had been investing only in treasury bills, government bonds and time deposit only.

All the above mentioned studies had contributed much on investment activities, practices and profitability of the fund. And also the accounting and reporting practice of the pension fund and the development of the pension plan. But not done on management challenges and ways of overcoming those challenges.

Therefore this study contributes on investment management issues by identifying management challenges concerning investment of social security fund, recommending possible ways of reducing those challenges and also indicating more profitable investment opportunities.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This chapter is concerned with the philosophy or the general principles of research methodology which guides the research to be systematic and solve the problem scientifically and provides a comprehensive description of the research method and techniques that was applied in the entire study. It includes, research design, population and sampling techniques, types of data and tools, procedures of data collection, and methods of data analysis.

3.1 Research Design

According to Mugenda & Mugenda (2003), descriptive research is used to obtain information concerning the current situations of the phenomenon to describe what exists, with respect to variables or conditions in a situation. Most social researchers uses descriptive approaches because to answer for the Who, What, When, Where and How of an event. This study adopted a descriptive research design which is used to show the existing investment practice of social security fund investment and the challenges that constraint the investment management of pension funds in Ethiopia.

3.2 Population and Sampling Techniques

The target population of the study was focused on the Investment and Fund Management Directorate of Public Servants Social Security Agency (PSSSA) and Private Organizations Employees Social Security Agency (POESSA) employees. They were selected intentionally by the researcher considering their relation and the expectation of having deep knowledge of the subject under study focusing on the officers who serve as Directors, Team leaders, Senior Accountants and Accountants they are 12 in numbers. The available management team members of both PSSSA and POESSA were also part of the target population they are 28 in numbers.

Since the target population is small in number, the data collection cost for these respondents is very low and make more reliable on the data; hence the researcher chosen the census method for data collection than sampling technique. The total population size of the research was 40.

3.3 Source and Tools/ Instruments of Data Collection

The researcher used both primary and secondary source of data to gather sufficient information for the study under investigation. The primary data was collected through interviews and questioners. The secondary data source was mainly focused on financial reports of the PSSSA & POESSA, proclamations and document reviews on pension fund investment activities of the organizations.

3.4 Procedures of Data Collection

After the problem was defined, initial facts and data on prevailing practices was collected to show the extent of the problem. These important data was obtained using semi-structured interview, structured questioners and secondary documents that relate to social security pension fund investment. All facts, opinions and evidences that were collected and analyzed were organized to come out with relevant information. A face to face interview was conducted with the Investment and Fund Management Directorate of Public Servants Social Security Agency and Private Organizations Employees Social Security Agency staffs, Ethiopian Investment Agency (EIA) communication expert and MoFEC debt management directorate director. They were selected intentionally by the researcher considering their relation and the expectation of having deep knowledge of the subject under study focusing on the officers who serves as a Directors, Team leaders, Senior Accountants and Accountants. During interview, the interviewee had been answered based on the semi-structured interview, regarding the practice and challenges of social security fund in Ethiopia were discussed.

The design of the data collection was based on the combination of literature analysis and qualitative research carried out before the questioner. To collect appropriate data and answer the research questions, structured questioner were designed and delivered to 28 management team members of both PSSSA and POESSA respondents personally and through e-mail together with a covering letter explaining the purpose of the study, instruction how to fill and assuring them anonymity. Secondary data used from financial reports of the PSSSA & POESSA, proclamations and document reviews on pension fund investment activities of the organizations and so forth. Since the researcher of this study has near contact with the agencies, direct observation was done to collect the data.

3.5 Method of Data Analysis

In organizing the study to come up with empirical results, most of the data collected from the agencies was believed to be representative of the organization. For the study both quantitative and qualitative methods of data analysis was used. After the data was collected, it was coded and entered in to Statistical Package for Social Science (SPSS) version 20 for analysis. The summarized data was presented in the form of table. For descriptive methods of analysis, Percentages, frequencies and mean was used to summarize and categorized the collected data. In addition, interviews and questions that had subjective explanations, containing fact information, were analyzed qualitatively in a way that answers the research questions.

Whereas secondary data like financial reports of the PSSSA & POESSA, proclamations and document reviews on pension fund investment activities of the organizations were summarized and explained descriptively by researcher.

CHAPTER FOUR

RESULTS AND DISCUSSION

In this chapter of the study, the data that were collected using interview, questioner and document review are presented and an attempt is made to show the results and findings of the study according to relevant issues and as per the objective set. Questioner were used to gather data form management team members of the agencies and the interview were employed to collect information from investment and fund management directorate staffs of the organization.

4.1 Pension System as Part of Social Security in Ethiopia

For the last fifty years, pension is the existing social security benefit for the public servants in Ethiopia. And more or less the Ethiopian SSA pension plan categorized on PAYGO pension plans as the retirement pensions paid out over a given period are financed from the contributions paid over that same period by those in employment (employees and employers). Based on the benefit the SSA pension plan promises to beneficiaries it is categorized as a defined benefit plan. The Ethiopian pension system is a definedóbenefit type where the pension formula is defined in advance.

4.1.1 Public Servants Social Security Agency (PSSSA)

Public servants social security agency is accountable for the Ministry of Labor and Social Affairs (MoLSA). It gives social security service to both military and police and also to civil servants. It covers benefit payment for old age pension, invalidity pension and survivorsøpension payments and lump sum payments like reimbursement and gratuity.

The agency is also responsible for administering the fund and using it for investment on treasury bills and other reliable investments which are to be specified by MoFEC after the amendment of the proclamation in 2011 and it can also use it for its administrative costs. (Proc. 714/2011)

4.1.2 Private Organizations Employees Social Security Agency (POESSA)

Private organizations employeesø social security agency was established in 2011 and it is accountable for the Ministry of Labor and Social Affairs (MoLSA) as well. It gives social security coverage to private organizationsø employees. The benefit Packages covered by the

agency are the same as that of PSSSA and its way of administration is similar. This agency was established recently in 2011 but it has collected very high amount of money in short period of time, because of the salary of private organizations employees is high.

POESSA has the authority to administer the fund, to invest it in the same way that the public organizations employees social security agency does. Concerning the use of the fund for administrative costs, the agency was utilizing budget assigned by MoFEC but recently it has started using its own fund for administrative costs. (Proc. 715/2011)

Globally, there are general principles which are expected to be followed by social security institutions while investing the pension trust fund such as, safety, yield, liquidity, national interest, diversification and capital preservation.

Both organizations use some of the internationally accepted principles of investing pension fund like safety, yield, liquidity and national harmony with public interest. But in case of both agencies, safety is given the highest consideration.

4.2 Analysis and Findings of the Study

The questioners prepared by the researcher for the two target groups and their responses are categorized in tables below. The analysis comprises both the idea of respondents and secondary document review. Results and discussions are presented in accordance with the basic questions asked in relation to the topic under analysis. Some of the findings and questions which are not convenient to compile in tables are analyzed without tables.

4.2.1 Characteristics of Respondents

A total of 12 employees were personally contacted by the researcher and interviewed from both PSSSA and POESSA investment and fund management directorates and each of them have been working on positions related to pension fund investment of the two agencies. In addition structured questioners were distributed to 30 respondents; of which 28 has collected from management team members of both organizations are summarized and presented below.

		Investment d	& Fund				
Items	Options	Managemen	tDirect	Management		Total	
		orate Staffs		Team			
		Frequency	%age	Frequency	%age	Frequency	%age
	Male	8	67	18	64	26	65
Gender	Female	4	33	10	36	14	35
	Total	12	100	28	100	40	100
	PhD	0	0	0	0	0	0
Educational	MA/MSc	3	25	9	32	12	30
Status	BA/BSc	9	75	19	68	28	70
	Diploma	0	0	0	0	0	0
	Total	12	100	28	100	40	100
	Less than 10						
Work	Years	4	33	0	0	4	10
Experience	11-20 years	6	50	18	64	24	60
	21-30 years	2	17	8	29	10	25
	Above 31	0	0	2	7	2	5
	years						
	Total	12	100	28	100	40	100
			Deputy	Director Ger	neral	2	5
	Management	Team	Directo	or		26	65
Current			Directo	or		2	5
Position	Investment &	k Fund	Team I	Leader		2	5
	Directorate S	Staffs	Senior	Accountant		4	10
			Accour	ntant		4	10
		Т	otal			40	100

Table 4.1 Characteristics of Respondents

Source: Own survey data, 2017

As can be seen from the above table the first demographic variable that is gender division of the respondents, 65% of the respondents were males and the remaining 35% were females. This data

of sex composition indicates there is a good proportionate employeeøs participation on female in this research that helps the researcher to collect opinion from both sexes.

It is also apparent from table 4.1 that the majorities of the respondents 28(70%) hold a BA/BSc degree, the remaining 12(30%) respondents were found to be on MA/MSc level of education. The same table shows from the total respondents 2(5%) is currently a deputy director generals, 26 (65%) directors, 2(5%) team leaders, 4(10%) senior accountants and the rest 4(10%) are accountants of PSSSA and POESSA.

With regard to years of services more of the respondents 24(60%) served between eleven and twenty years, followed by 10(25 %) respondents that served between twenty one and thirty years, 4(10%) respondents served less than 10 years, and 2(5%) of them also serve more than thirty one years. This indicates that majority of the respondents from investment and fund management directorate director and employees concerning both organizations have experiences more than 11 years. Furthermore, the data indicates that majority of the respondents have been working in the same or related department for many years at PSSSA and still working there and also transferred to POESSA following its establishment in 2011. This shows that respondents have the necessary experience and knowledge about the pension fund investment. The same is true for the management team members. That is, majority of them have long experience in management and other types of work.

4.2.2 Existing Investment Opportunities of PSSSA and POESSA

The investment and fund management directorate employees and director of both organizations were asked to mention the existing pension fund investment opportunities in Ethiopia. Accordingly, all respondents from POESSA (i.e., investment and fund directorate employees and director) confirmed that the organization is investing its entire fund only on treasury bills issued by MoFEC keeping 10% fund reserve for pension payment by the decision of the board from collection for three consecutive years (2012 ó 2014). However, since 2015, it has additionally started to use a fixed amount of the fund for financing its administrative costs with the decision of the board. In case of PSSSA, the respondents implied the fund is currently invested on treasury bills but there are former investments on government bond and time deposit in

government bank (Development Bank of Ethiopia-DBE) and some other assets, which earn a very little amount of return because they are not withdrawn yet.

Year	Treasury Bill	Time Deposit	Government Bond	Bank Shares
2012	6,308,075,000.00	463,157,000.00	75,596,000.00	9,403,000.00
2013	8,467,392,000.00	463,157,000.00	50,397,000.00	9,937,000.00
2014	14,545,289,000.00	463,157,000.00	25,199,000.00	9,937,000.00
2015	19,312,145,000.00	463,157,000.00	0.00	9,937,000.00
2016	30,474,610,000.00	463,157,000.00	0.00	10,794,000.00
Sum	79,107,511,000.00	2,315,785,000.00	151,192,000.00	50,008,000.00
Mean	15,821,502,200.00	463,157,000.00	30,238,400.00	10,001,600.00

The following table shows investment portfolio mix of the two organizations.

Table 4.2	Portfolio	Mix of Assets	Invested by	y PSSSA
-----------	-----------	----------------------	-------------	---------

Source: own computation based on data from PSSSA, 2017

year	Treasury Bill
2012	413,755,000.00
2013	1,720,323,500.00
2014	3,745,230,500.00
2015	6,880,491,000.00
2016	11,216,250,000.00
Sum	23,976,050,000.00

Table 4.3 Portfolio Mix of Assets invested by POESSA

Source: own computation based on data from POESSA, 2017

Data presented on Table 4.2 provides evidence that is consistent with what is reported by the interviewees and the response from management team members. Therefore, the presently existing pension fund investment opportunities are Treasury bill issued by MoFEC for both organizations and earlier government bond, time deposit in DBE and other assets like share for PSSSA. The table also shows that PSSSA has invested an average amount of 15.82 billion birr on treasury bills between 2012 and 2016 which is the highest amount than other portfolios of the

pension fund investment. Investment areas other than the Treasury bill are either nonexistent or are decreasing. Regarding the investment portfolio of POESSA (table 4.3), evidence suggests that a large amount of money was being invested only on treasury bills since its establishment. This shows that in both PSSSA and POESSA, the highest investment is made on treasury bills until now.

4.2.3 Unutilized Pension Fund Investment Opportunities of PSSSA and POESSA

When one see and determine an investment opportunity unutilized especially for pension fund investment can consider the most important principles of fundøs investment: safety, yield, liquidity and public interest.

Since the fund is collected from the public and it is after all a trust fund, the issue of safety should be stressed. Though there is no completely risk-free area of investment, investing on assets such as treasury bills and government bonds are more preferable to minimize risks. However, risk minimization is not only possible through investing on risk free assets but also via diversification (ISSA, 2005).

As pointed out in chapter two, the other important principle to social security fund investment is return (yield). This principle emphasizes on getting high return. In order to get remarkable yield, assets must be invested in an area having high return and this is possible mostly with high risk. Therefore, investors demand is getting high return (yield). Liquidity is also a criterion to choose investment portfolios to be easily convertible to cash. The fourth principle states that Public interest should also be taken in to account. Meaning investment must be made on more socially desirable areas.

All the management team members think there are unutilized investment opportunities in the Economy; these are Time deposit, government bonds, real-estate, shares from the banks, etc. The interviewees from investment and fund management directorate of the two organizations also confirmed the same thing. Especially the interviewees from PSSSA attested that it has been tried in their organization some years back and no problem was observed, it was stopped by the directives of MoFEC and the investment was made on treasury bills only for the sake of safety. As can be observed from table 4.2 above, public servants social security agency diverted its fund investment completely to treasury bills, after the proclamation was amended and its investment

mix accounts about 97% from the total portfolio share. This has an implication that government wants to finance itself. It also shows that the system undermines the possible income that the same investment could have gained, had it been invested in other possible investment opportunities.

The researcher also visited the Ethiopian Investment Agency to see what opportunities does the fund has, but the information found from communication expert of the agency, the agency is directed towards working strongly on foreign direct investment activities of the country rather than other investment activities now a time.

Therefore, in order to identify the unutilized investment opportunities, the researcher has asked the two target groups that are the investment and fund management directorate employees and director and the management team members of PSSSA and POESSA to identify the unutilized pension fund investment opportunities. As can be seen from table 4.4, large number of the respondents from both organizations management team members suggested that among the opportunities include a) time deposit in banks; b) real estate development; c) investment on agro industry; d) buying government bonds; e) establishing commercial banks or insurance companies; and, f) buying shares from existing companies.

From the investment and fund management directorate employees target group, there were 2 people who subjected the organization can build a house and rent it to investors but the other interviewees suggested the organizations to use time deposit and real estate investment opportunities. All respondents and interviewees were asked the reason why they choose the investment opportunities they suggested. And they replied that investments like real estate and time deposit have minimum risk and better return than the investment portfolios that the organizations are using now. And others believe there is no better return without taking a little more risk and that it has been tried and did have a better result.

The respondents chose the above mentioned unutilized investment opportunity is that, there were an experience of investment portfolios before the agency restricts by proclamation No. 714/2011.These were Time deposit in Development Bank of Ethiopia and Construction and Business Bank, A real-estate development projects in Bahir Dar and Hawass cities and a government bond issued by MoFEC.

	Frequency	Percent
Agro industry	1	3.6
Time deposit in banks	4	14.3
Real estate	6	21.4
Other (Ax ions, Shares etcí)	3	10.7
Time deposit and real estate	8	28.7
Real estate and others	2	7.1
Time deposit, Government bond and real estate	2	7.1
Agro industry, Time deposit in banks, Government bonds, real estate and others	2	7.1
Total	28	100.0

Table 4.4 Respondents' Opinion Regarding Unutilized Pension Fund InvestmentOpportunities

Source: Own survey from questioners, 2017

4.3 Effects of restrictions imposed on the Pension Fund in Profitable Investment Opportunities on the Long Run Sufficiency of the Fund

4.3.1 Investment Return and Overall Performance

In order to know where an organization performance in any activity is, the organization should measure its performance periodically using appropriate indicators. Regarding investment of pension fund in PSSSA and POESSA, as their respective annual reports shows they usually set objectives to invest some stated amount i.e. the collected amount of fund less administrative and pension payment costs and also less the fund reserve amount and finally to invest the rest of the fund on treasury bills to get return with the calculated amount by 0.3% rate of return (invest 99.70 birr for 91 days to get 100 birr).

Finally they measure their performance based on their achievement. They do not bother in measuring the investment¢ performance regarding the nominal, risk and inflation adjusted real rate of return. Nevertheless, ISSA social security pension fund investment guidelines demand measurement of performance analysis of each asset class in a portfolio by determining nominal, risk adjusted and inflation adjusted real rate of return and disclose the result to the public.

Even though the two organizations did not measure the investment performance of their respective organizations, evidence suggests that the rate of return is very low and the fund is getting a very low return.

Table 4.5 below presented secondary data that indicates the real rate of portfolio return for PSSSA taking into account the inflation rate. It is evident that the real rate of return has been negative during the study period (2012-2016).

Year	Nominal rate of portfolio return in %	Inflation rate* %	Real rate of portfolio return%
2012	1.3	23.33	-22.03
2013	1.2	8.07	-6.87
2014	1.1	7.50	-6.40
2015	1.1	12.07	-10.97
2016	1.0	7.29	-6.29

 Table 4.5 PSSSA's level of performance based on nominal and real rate of interest

Source: own computation based on PSSSA data (2017)

*CSA, 2017

Similarly, Table 4.6 reveals that the real rate of return on portfolio for POESSA has been negative during the study period (2012-2016). Real interest rate indicates negative results. It tells us the inflation rate is larger than the nominal interest rate and the agency is losing its money.

Year	Nominal rate of portfolio return in %	Inflation rate* %	Real rate of portfolio return%
2012	0.22	23.33	-23.11
2013	0.71	8.07	-7.33
2014	0.84	7.50	-6.66
2015	0.91	12.07	-11.16
2016	0.90	7.29	-6.39

Table 4.6 POESSA's level of performance based on nominal and real rate of interest

Source: own computation based on POESSA data (2017)

*CSA, 2017

When we see the secondary data it is clear that the change in level of nominal rate of return is positive but very low and decreasing tremendously over time in PSSSA and POESSA. In both organizations, the real rate of return (the nominal rate less the inflation rate) has been negative.

When we see the nominal rate of the agencies PSSSAøs return is slightly higher than that of POESSAøs return. This is because of PSSSAøs has investments other than treasury bills, i.e. Time Deposits, Government Bonds & Shares which has relatively better interest rate than Treasury Bills.

4.3.2 Source of Finance and Pension Payment

In PSSSA and POESSA the two sources of funds for pension schemes are the regular contribution of employees and employers and the return from investing the excess of cash from pension contributions over benefit payments. Currently, the rate of regular contribution is 18% of the civil servants pension fund and 32% in the Military and Police Service Pension Fund. The employees share in both cases is 7%. 11% contributed by the public office in the case of civil service pension fund. The public office in the case of military and police service pension fund contribute 25%. (Proc. 714/715 (2011))

The first high amount of expenditure for the pension fund is pension payment and the other is administrative costs. In prudent person view, it is apparent that the growth of return from investment and growth of contribution must be higher than that of growth of pension payment and administrative costs. This is because if the opposite is true, the fund will face deficiency in the long run (it becomes unsustainable). Table 4.7 shows the trends of contribution, return from investment and pension payment for PSSSA.

It is found that pension contribution and return from investment have been increasing over time. This is a good sign for the fund not to face deficiency. Also when we see the average growth rate of contribution it is 31.51 and that of return from investment is 38.25 whereas the average growth of pension payment is 23.09. This also indicates that growth rate of revenues is greater than growth rate of expenditures.

Table 4.7 PSSSA's Growth of Pension Fund Contribution, Return from Investment andPension Payment

Year.	Contribution	Return from	Pension	Growth of	Growth of	Growth of
	(million birr)	investment	payment	contribution	return from	pension
		(million birr)	(million birr)	(%)	investment	payment
					(%)	(%)
2012	4,363.00	89.00	1,374.00	-	-	-
2013	6,334.00	105.60	1,804.00	45.18	18.65	31.30
2014	7,824.00	160.28	2,270.00	23.52	51.78	25.83
2015	9,780.00	211.29	2,829.00	25.00	31.83	24.63
2016	12,944.00	318.48	3,129.00	32.35	50.73	10.60
Total	41,295.00	884.65	10,796.00	126.05	152.99	92.36

Source: own computation based on data from PSSSA, 2017

The growth of pension payment compared to the growth of return from investment is low because the amount invested is a huge amount of money compared to the amount which is paid as pension. Though still it is a good sign for the sustainability of the fund if return from investment is higher than pension payment. When we see total pension payment as a percentage of contribution from 2012-2016, it is 26.14% which is almost one forth and that indicates shortage of fund is not likely to happen at present. But the rate of return from investment is very much lower than inflation rate and this could affect the value ability of the fund and could lead

to shortage of fund in the long run. Besides, it is not bad to get more profit even to contribute to the economy.

4.3.3 The Extent to which the Fund is Losing its Profitability

It is apparent that the pension fund was being invested on a very low rate of return, which earns 0.3% only by considering safety. This section is intended to show how not investing the pension fund in better investment opportunities is affecting its profitability. As being shown above the organizations are more sensitive to safety than profitability. Despite that, the management team members and the investment and fund management directorate employees and director responded that there are unutilized investment opportunities and indicated those which they thought are the best. From those the researcher selected time deposit in banks because its risk is relatively very low and the deposit can be made in government banks still it can gain a better profit than that of treasury bills which is currently earns with interest of 5.125%. In addition, the public servants social security agency has been using it until the amendment of the proclamation in 2011.

Year.		PSSSA			POESSA	
	Current	Current return	Investment on	Current	Current	Investment
	total investment	from	time deposit in banks with rate	total investment	return from	on time
	amount (mil)	investment (mil)	of 5.125% (mil)	amount (mil)	investment (mil)	deposit in banks (mil)
2012	6,856.23	89.00	351.38	413.76	0.92	21.21
2013	8,990.88	105.60	460.78	1,720.32	12.21	88.17
2014	15,043.58	160.28	770.98	3,745.23	31.63	46.82
2015	19,785.24	211.29	1,013.99	6,880.49	62.64	352.63
2016	30,948.56	318.48	1,586.11	11,216.25	107.80	574.83
Total	81,624.56	884.65	4,183.26	23,976.05	215.20	1,083.66
Average	16,324.49	176.93	836.63	4,795.21	43.04	216.73

Table 4.8 the Difference if the Fund had been Invested on Time Deposit

Source: Own computation based on information from PSSSA and POESSA data, 2017

Table 4.8 provides data on current return on investment and potential (forgone) return had the pension fund been invested on Time deposit in DBE (assuming an interest rate of 5.125%). It is shown that had the funds been invested on time deposits, the return would have been more than 4 times of what PSSSA is actually getting from current investment and more than 5 times of what POESSA is gaining from current investment. On the average PSSSA is losing 659.70 million birr and POESSA is losing 173.69 million birr every year. Within 5 years PSSSA has lost 3,298.50 million birr and POESSA has lost 868.45 million birr. This shows that the two organizations are losing a great deal of money every year because of not investing the fund in an investment area which yields better return.

Interviewees from investment and fund management directorate and respondents from the management team members of the two organizations were asked if not investing the pension fund on profitable opportunities affect the long run sufficiency of the fund. The interviewees of PSSSA explained that it is unlikely to happen because pension payment is mostly depended on contribution and until now contribution is higher than pension payment. Regarding the interviewees of POESSA all agreed that the fund will face deficiency because the organization is paying pension that doesnøt collect because of portability right of pension payment and delay to compensate the uncollected pension from PSSSA. In addition to that, the salary scale of employees of private organizations is very high, the pension payment they get is also very high compared to civil servants and the organization is new yet working to include all private organizations in to the scheme. In the meantime if it doesnøt invest the fund in profitable investment opportunities, it is very likely that it faces deficiency. The responses of the management team members of both organizations are summarized as follows in table 4.10.

Table 4.9 Respondents'	Opinion	Regarding	the Probability	of Insufficiency of	of the Funds
···· · · · · · · · · · · · · · · · · ·		- -			

Probability of insufficiency of the fund	Frequency	Percentage
It is possible that the fund will be insufficient for the future	13	46
It is impossible that the fund will face insufficiency for the future	15	54
Total	28	100

Source: own survey based on questioner, 2017

As table 4.9 reveals, 13(46%) of the respondents agreed that it is likely to face deficiency in the future, eventually dependency rate will be higher as the current young generation reaches retirement age. And the important point is the increase in life expectancy. Whereas 15 (54%) of management team members of the respondent that it is impossible that the fund will face insufficiency for the future. The reason that they strongly think contribution is always higher than pension payment.

4.4 Challenges of Managing Investment of Pension Fund

In many countries, the responsibility of investment management for pension funds passes to either a separate investment committee or board that oversees the overall activities of the fund or the main board of trusteesø serve as an investment committee. Therefore, there should be a separate body which is concerned only about the investment activities of the pension fund. In addition, the rules and regulations of the country, internal policies, guidelines and procedure are also mandatory for effective and efficient practice of pension fund investment.

4.4.1 Legal Basis for Investment Activities of Pension Fund

The researcher has asked the management team members, the investment and fund management employees and directors of the two organizations about ways of administration and different management issues concerning the investment of pension trust fund. Their responses are analyzed below.

Table 4.10 Basis for Investment of the Fund

Description	Respo	Respondents	
	No.	%	
• Does the agency invest the pension fund based on proclamation No. 714/715?			
Yes	28	100	
No	-	-	
I don¢t know			
Total	28	100	
• Does the agency have an internal policy or guide line concerning the pension fund investment administration?			
Yes	8	28.57	
No	20	71.43	
I dongt know	-	-	
Total	28	100	

Source: own survey based on questioner, 2017

Table 4.10 above reveals that both social security fund administering organizations invest their pension funds based on the proclamation number 714/2011 for PSSSA and 715/2011 for POESSA. Based on Proclamation 714/2011 Article 14, sub article 1-b) declares the investment of the public servants social security pension fund is only allowed to be invested in treasury bonds and other profitable and reliable investments which are to be specified by directives to be issued by the MoFEC. The same statement is proclaimed in proclamation number 715/2011 under Article 13, sub article 1-b) restricting investment activities of the POESSA. The existence of this proclamation restricts the organizations investing the fund in other profitable investment opportunities.

The other legal basis for investment of the pension fund is the internal policies prepared by the organizations. POESSA has no internal policy document prepared only for pension fund investment. But PSSSA has internal policy for the investment of the pension fund and its policy document was prepared based on the proclamation of the organization. But it is not that much operational especially concerning usage of unutilized profitable investment opportunities at the

time being. Though in the earlier times, PSSSA used its internal investment policy to invest the fund in better investment opportunities until it was restricted by MoFEC after the amendment of the proclamation in 2011.

Types of Investment	Percentage of Asset Allocation Strategy Provided by the Guideline	*Percentage of Current Asset Allocation		
Demand deposit	2	0.00		
Saving deposit	8	0.00		
Time deposit	35	1.50		
Treasury bill	15	98.47		
Sub total	60	99.97		
Long term				
Government bond	5	0.00		
Corporate bond and share	25	0.03		
Real state	10	0.00		
Sub total	40	0.03		
Total	100	100		

Table 4:11 Asset Allocation Strategies (Investment Portfolio Mix) of PSSSA

Source: PSSSA& *Own Computation, 2017

4.4.2 Efforts Made to Improve Investment Activities of the Organizations

The investment activities of the two social security fund administering organizations have a directorate which is called investment and fund management directorate. Among other things this directorate is responsible to invest the collected fund and control the entrance of the collected fund and the investment return to bank and do different accounting activities. Both the

directorate and the organization itself have no mandate on the investment of the pension fund. But there would be struggle to find a room to do more regarding the pension fund investment.

Concerning the conduction of different studies to identify new and more profitable investment out lets. In POESSA no studies have been conducted concerning the issue. But in PSSSA studies were conducted about better investment opportunities and those studies were able to convince the board of directors to let the fund be invested in time deposit, real estate and government bonds. Even though, their activities were stopped.

PSSSA and POESSA have no investment committee established to control the investment activities of the agencies. The activities are done by the investment and fund management directorate. If they had an investment committee it would have been better to conduct different studies and find investment opportunities with relatively better returns. They could also have the strength to pressure the policy makers think about amending the currently existing proclamation or create some improvements.

4.4.3 Challenges of the Social Security Fund Investment in Relation to Administrative Issues

The researcher has tried to identify the major challenges indicated by the management team members of both organizations and also from investment and fund management directorate staff interviewees.

Table 4.12 indicates that 22(79%) of the respondents agree and strongly agreed that the presently existing Proclamations have negative impact concerning the pension fund investment activities of both organizations. The proclamation restricts the fund to be invested only on treasury bills and other securities issued by MoFEC which have low return.

Although restricting the fund with different proclamations has more Positive impacts on the return from investment, Interviewees and those who agreed to its positive impacts from management team members argues that the fund is trust fund and it should consider safety more than profitability, if it encounters loss, the government will be liable to pay for the beneficiaries.

And they also added that there are other opportunities less risky and which can generate better profit. So, the proclamation should put some considerations for additional investment out lets or it can also put quantitative restrictions. 20(71%) of the management team members of both organizations also agreed to the idea of restricting the investment in quantitative terms is a better idea.

Table 4:12 Challenges of the Social Security Fund Investment in Relation to Administrative							tive
Issues							
						~	

Descriptions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The presently existing proclamations have negative impact on the investment activities of the agency	12(43%)	10(36%)	0(0%)	4(14%)	2(7%)
Restricting the fund with different proclamations, rules and regulations has positive impact	2(7%)	18(64%)	0(0%)	5(18%)	3(11%)
Concerning the pension fund investment, quantitative restriction must be set by law	4(14%)	16(57%)	0(0%)	5(18%)	3(11%)
The presently existing proclamation restricts the mandate and activities of the agency	14(50%)	12(43%)	0(0%)	2(7%)	0(0%)
The presently existing return from investment is enough to develop the fund	0(0%)	5(18%)	0(0%)	13(46%)	10(36%)
The fund investment activities in your organization works according to the presently existing proclamations	13(46%)	15(54%)	0(0%)	0(0%)	0(0%)
The presently existing investment activities are achieving the objectives of the organizations	8(29%)	20(71%)	0(0%)	0(0%)	0(0%)

Source: own survey based on questioner, 2017

Respondents and interviewees were asked if restrictions put in the proclamation holds the mandate of the organizations and what is its effect on the development of the fund. 26(93%) of the respondents from the management team members agreed that the proclamations restricts the mandate of the two agencies.

They were also asked if the present return from investment is enough to develop the fund 23(82%) disagreed to the idea and the interviewees also argued that the return from investment is very low and this implies that the development of the fund is very low.

In both PSSSA and POESSA, the current activities of investment are undertaken based on the proclamation number 714/715 (2011). This was confirmed by the management team members of the two organizations because all of the respondents agreed that their respective organizations are using the above mentioned proclamation to direct their present pension fund investment activities as presented by table 4.12 above.

The respondents also agreed that the agencies are achieving the presently existing investment objectives (the organizations are investing their entire funds only on treasury bills issued by MoFEC keeping 10% fund reserve for pension payment and a fixed amount of the fund for financing its administrative costs with the decision of the board) of their respective organizations. This is because the agency sets objectives with the existing investment outlets only and the rate of return is already known.

List of Challenges	Very high	high	medium	Low	Very low	Total
Lack of experienced						
man power	8(29%)	5(18%)	7 (25%)	5(18%)	3(10%)	28(100%)
The internal investment						
policy of the	1(4%)	7(25%)	2(7%)	7(25%)	11(39%)	28(100%)
organization						
The capital invested is						
very low	0(0%)	0(0%)	0(0%)	10(36%)	18(64%)	28(1005)

Table 4:13 Internal Challenges of Pension Fund Investment

Source: own survey based on questioner, 2017

As table 4.13 reveals above, lack of experienced man power is a challenge for investment of the fund because majority 20(72%) of the respondents from management team members agreed that it is a very high, high and medium challenge in their organizations and the interviewees from investment and fund management directorate of both organizations also confirmed that they have a problem of experienced investment experts, because, most of the directorates staffs are financial experts not investment experts.

When we look the internal investment policies as a challenge, PSSSA since it has an investment policy, majority of the respondents agreed that it is a challenge and from the interview of the investment and fund management directorate employees of the organization the researcher gathered that the policy puts investment portfolio mix and other important things but it doesn¢t consider other issues about investment like performance measurement, investment management including its governance structure and mechanism. But in case of POESSA, the organization doesn¢t have separate internal investment policy in the first place. Therefore its influence as a challenge is very low as can be seen from the table above. But we can raise the nonexistence of the policy document by itself as a challenge.

Concerning the capital investment, the respondents agreed that its influence is low because the level of investment is very high as in both PSSSA and POESSA. Therefore, the capital invested is not very low and it is not a challenge at all.

4.4.3.1 External Challenges of Pension Fund Investment

Respondents were asked to indicate situation of the financial market, existence of low rate of return, high inflation rate and different lows related to pension fund investment based on their challenge level to the overall investment activities of the organizations.

According to interviewees of both organizations, absence of financial markets is not the challenge of investing the fund in profitable investment opportunities.

More than half of the respondents and also the interviewees of both organizations agreed that the agency earns low rate of return usually below inflation rate is a huge challenge that is hindering the organizations from getting the return they deserve from investment. In addition, restrictive proclamation is the other very influential challenges that the investment of pension fund is facing at the time being as leveled by the respondents.

As we see from the challenges the very challenging for investing the reserved pension fund in profitable investment portfolio is that the restriction of MoFECs directive.

According to the proclamation No. 691/2010 Ministry of Finance and Economic Cooperation (MoFEC) shall have different powers and duties. There are about 23 directorates to perform different activities. Debt Management Directorate is one of the Directorates under MoFEC. Itsø major duties and responsibilities include:-

- ÉFormulation, in collaboration with other responsible bodies, and implementation of medium term debt strategy to achieve desired composition of debt portfolio with a desired level of costrisk trade-off.
- ÉConducting debt sustainability analysis, to assess the long-term sustainability of existing debt and projected borrowing based on the macro economic projections levels.
- ÉUndertaking portfolio analysis to assess future debt service obligations problems and propose action that should be taken to overcome them.
- ÉCoordinating with Directorates within Ministry of Finance and Central Bank for effective debt management.
- ÉEnsuring timely and accurate debt service payment for Central/Federal Government debt and record all the required data in the debt management information system.
- ÉMonitoring disbursements and repayments of government guaranteed and non-guaranteed debt of state owned enterprise and record all the required data in the debt management information system.
- É Participating in the administration of deficit financing of the Federal government budget through Treasury Bills issuance and Direct Advance from National Bank of Ethiopia. (MoFEC, 2016)

The researcher visited MoFEC Debt Management Directorate Director for gathered information about why MoFEC restrict the agencies invests the reserve fund only on Treasury Bills? The director responds that this issue is the Government (MoFEC) directive for the pension fund investment. Central government domestic debt in Ethiopia is mainly consists of Treasury Bills and direct advance from the central bank (National Bank of Ethiopia). National Bank of Ethiopia gives a direct advance to cover of the government deficits. Because of not availability of secondary market in the country, currently the only instrument issued by MoFEC is Treasury Bills.

Currently MoFEC issued a three month (91 days) Treasury Bills. The Ministry is highly egger to convince the agencies to invest all their reserve funds on a one year Treasury Bills, but the agencies are refusing to buy the one year Treasury Bills and invest their funds on the 91 days treasury bills because its return is higher than the one year Treasury Bill when sum up within a year.

MoFEC is stressing on the necessity of restricting the fund from other investment opportunities because the government is liable in case of the fund faces loss or bankruptcy. The director also informed that different private commercial banks repeatedly request the agencies to invest their money in a short term Time Deposit with better interest rates. But the fund is a trust fund, MoFEC informed the agencies with official letters to refuse the banks request. So MoFEC has restricted investment of the reserved pension funds on its own security instruments (Treasury Bills) to make it risk free.

According to debt management directorate director information, currently there was a study which would be applied in the coming Ethiopian budget year. The study was about the establishment of domestic debt market (secondary market). The study was done with the consultancy of IMF experts and with the full participation of NBE and MoFEC and the directive preparation is also finalized. The content of the directive is in addition to the issuance of Treasury Bills by MoFEC, it also issues short term government bounds that have a period of less than five years. The interest rate would also be 5%-6%.

The debt management directorate director also added that after issuance of the bond if the agencies face a liquidity problem they would able to be sale the bond in secondary market, in this case NBE. So, establishing a secondary market and creating other instruments than Treasury Bills make the agencies comfortable to have a better return.

Finally, both respondents from the management team members and interviewees from investment and fund management directorate employees and directors of the two organizations were asked their opinion about what the solutions should be invest the fund in a more profitable and reliable investment opportunities available. They responded that the organizations should be free from government interference and the decisions about investment must be made by the boards. They also stressed that the agencies should form an investment committee and should prepare an internal policy document about investment. They also added that studies should be conducted to invest the fund in profitable opportunities and benchmarks should also be taken in to consideration in order to select the best one and implement it here. They generally suggested that the current proclamation should be amended and give the mandate of the investment administrations to the agencies.

CHAPTER FIVE

CONCLUSIONSAND RECOMENDATIONS

This chapter contains conclusion and recommendation of the study based on the findings discussed in detail in chapter four.

5.1. Conclusions

The current regulatory system is restrictive in that it prohibits pension funds to invest in different investment portfolios other than Treasury Bills. It also limits the organizations mandate from investing in profitable situations and currently the fund is totally used to cover government expenditures. This implies that there is a very high government intervention.

Based on the current investment practices of the organizations, the nominal rate of return is very low and it has a decreasing trend, moreover when compared to inflation the real return is always negative which shows the investment activities of the fund currently at loss. Various studies in the reviewed literatures show that setting a quantitative restriction whether on international diversification or domestic diversification doesnøt bring the desired optimal risk/return tradeóoff. They show also at least taking domestic diversification would shift the risk return efficient frontier. The findings also reveal the necessity of considering diversification as one of the general principles that guide the investment decisions of the agencies as diversification helps to consider assets that are long term in nature and generate real returns that are positive and stable over time.

Even though ISSA¢s rules and regulations stated that the investment performance of the fund must be periodically measured and the results should be disclosed to the public including pensioners, the agencies investment performance has never been measured thinking the fund investment is only on Treasury Bills and the return it is getting is obvious.

There is lack of a statement of investment principles to guide their investment decisions and monitor their investment and fund management staffs.

There is a lack of existence of policy document and even if it exists it is not detailed and important issues are missing. In addition there is no separate committee developed to undertake the investment activities only and no effort has been made to study more profitable and reliable investment opportunities. Trustees lack of competencies to manage pension fund investments.

5.2. Recommendations

According to the study findings and conclusions the following recommendations are forwarded.

Review of the current regulatory system regarding pension funds so as to ensure efficient management of pension fund investment. The regulatory reform must make it mandatory for pension funds to have an investment policy and regulations, and statement of sound investment principles. This would promote good governance of pension fund investment;

Since the present return from investment is very low, the organizations should give attention and work with MoFEC on finding ways of using the unutilized pension fund investment opportunities which are available at the time being like time deposits, shares, real estate and even opening its own bank and insurance companies and diversify its investment outlets.

Policy makers should give attention to improvement of the proclamations and decreasing government intervention since the agencies are losing a very high amount of money every year because diversification and the mandate of decision making on investment of pension fund is restricted by law. Moreover, there is high government intervention. This is influencing the pension fund investment practice and the return it generates.

Some other countries restrict investment of the pension fund in risk taking assets in quantitative terms. For example Nigeria, investment in high yield bonds allowed by putting quantitative limitations. Our country could also use quantitative restriction in some risk taking investments and allow diversification rather than restricting the fund from being invested in a profitable way totally.

Empower pension fund trustees through training and educating them on pension fund investment management.

More studies could be done on analyzing the better investment opportunities that our country could use based on their level of risk and return and the influence of not investing the pension fund comparing the countries pension fund investment practices with other insurance companiesø investment practices.

REFERENCES

- Abebe Mesfin. (2003). Development of Social security, Practices, problems and prospects of Pension plan in Ethiopia. Unpublished Masterøs Thesis, Addis Ababa University.
- Alemu K.S. (2015). Pension Fund Management: The Case of Ethiopian Social Security Agency. *Journal of Business and Financial Affairs*, 4: 148.doi:10.4172/2167-0234.1000148.
- Amana. (2009). Investment of Pension Fund Assets in Kenya. Available: www.rba.go.ke. [Retrived on April 2017].
- Ambachtseer, K. P. (2001). A Framework for Public Pension Fund Management. Paper Presented at the 2001 World Bank Public Pension Fund Management conference, www.worldbank.org/finance/.[Retrived on April 2017]
- Assaminew E. (2010). Adopting private pension system in Ethiopia. *The African Symposium: An* Online Journal of African Educational Research Network.
- Blake D. (2007a). It's all back to front: critical issues in the design of defined contribution pension plans. Presented at the annual conference of DNB/ Netspar/IOPS on 22/3 March, Amsterdam.
- Catala NM. (2004). *Pension Funds and Corporate Govern, Developing countries*: What do we need to know?
- Cichon, M. (2002). *Financing Social Protection*. Geneva: International social security agency (ISSA).
- CSA. (2017).http://www.gdpinflation.com/2013/04/inflation-rate-in-ethiopia-from-2001to.html [Retrieved on May 2017]
- Davis E. P. (1995a). *Pension Funds, Financial Intermediation and the New Financial Land Escape.* The Pension Institute Cass Business School, United Kingdom.
- DavisE. P. (2000). *Regulation of private pension: Case study of united kingdom*, London: Financial service autority.

- Davis E.P. (2001). *Regulation of Private Pensions*: A Case Study of the United Kingdom. Occasional Paper No OP15. Financial Services Authority, London.
- Davis E. P. (2002b).*Institutional investors, corporate governance, and the performance of the corporate sector*. Economic Systems 26: 203-229.
- Diversification http://www.investopedia.com/terms/d/diversification.asp#ixzz4m9Gev0KQ [Retrieved on April 2017]
- Exley J, Mehta S, Smith A. (2003). Pension Funds. A Company Managerøs View.
- Ezugwu, C.I., Alex Abiremi, Itodo. (2014).Prtfolio analysis of Pension Fund Investment in Nigeria ,*Kuwait Chapter of Arabian Journal of Business and Management* Review Vol. 3, No.12; August. 2014
- Federal Negarit Gazeta. (1963). A public servants pension proclamation, proclamation No. 209/1963. Addis Ababa, Ethiopia.
- Federal Negarit Gazeta. (2010). Definition of Powers and Duties of the Executive Organs of the Federal Democratic Republic of Ethiopia, Proclamation No. 691/2010. Addis Ababa, Ethiopia.
- Federal Negarit Gazeta. (2011). A proclamation to provide for the public servants' pension, proclamation No. 714/2011. Addis Ababa, Ethiopia.
- Federal Negarit Gazeta. (2011). A proclamation to provide for pension of private organization employees, proclamation No. 715/2011. Addis Ababa, Ethiopia.
- Fund, S. P.(2013). www.spfo.org.UK/CHttpHandler.ashx?id=12617&p=0. [Online] [Retrived on April 2017].
- Galer. (2009). *Prudent Person Rule:* Standard for the Investment of Pension Fund Assets. OECD publishing.
- Haslem, John A. (2003). Mutual funds: *Risk and performance analysis for decision making*.Imam A. (2011). *Pension Fund Management in India*: government role and Regulatory issues.

- Impavido G, Hu Yw, Lix. (2009). *Governance and Fund Management in the Chinese Pension System*.
- International Labor Office. (1984). Into the Twenty-First Century: *The Development of Social Security*. International Labor Organization: Geneva.
- International Labor Office. (1997). *Investment of Social Security Funds*. Publisher the International Labor Organization Office, Module 4, Geneva.
- International labour office. (2009). managing investment. In: G. Colin, . T. John, B. Clive & L. Denis, eds. *Social security pension development and reform*. Geneva: ILO, p. 166.
- International Social Security Association. (2004). *Guidelines for the investment of social security funds*, ISSA 28th General Assembly, Beijing 12-18.
- International Social Security Association. (2005). *Guidelines* for the investment of social security funds.
- International Social SecurityAssociation. (2012). *Challenges faced by social security in africa*. Abijan: Africdan series.
- International Social Security Association. (2017). *Guidelines on Contribution Collection and Compliance*, 12-16 June 2017, Turin, Italy.
- Juan Y. (2008). Governance and Investment of public pension reserve funds in selected OECD countries.
- Kennedy B. (2015). Evaluating the Performance of Pension Funds: A Case Study of Social Security and National Insurance Trust. Kenya, Nairobi.
- Kyiv (code name). (2003). *Pension Investment Regulation*: Collection of Data and Recommendations. USAID.
- Liquidity http://www.investopedia.com/terms/l/liquidity.asp#ixzz4m9GH7kNJ [Retrived on April 2017]
- Modigliani, F. and Muralidhar, A. (2005). Rethinking Pension Reform, *Journal of Pension and Economic Finance*, Cambridge University Press.

- MoFEC. (2016). Ministry of Finance and Economic Cooperation, *Public Debt Statistical Bulletin.* June, 2016. Addis Ababa, Ethiopia.
- Mugenda, M., & Mugenda, G. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press
- Mulalem Berhane. (2002).*pension funds accounting and management of Ethiopian Social* Security Authority. Unpublished masterøs thesis, School of Graduate Studies, Addis Ababa University, Addis Ababa.
- OECD. (2006). OECD Guideline for pension fund asset management. 26, January 2006.
- OECD. (2009c). Submission to the OECD Working Party on Private Pensions. OECD. Paris.
- Paul C. and Catherine P. (2012). Investment and Risk in Africa.
- Philip DE. (2002). the European Pension Management Industry.
- Prequin. (2011). SpecialReport Public Pension Plans and Alternative Assets.
- Quigley J. (2006). *Real Estate Portfolio Allocation: The European Consumers' Perspective*.Conference Paper presented at the Annual Conference of the Real Estate Research Institute. Chicago.
- Russell J. and James L. (2014.) Modern Investment and Security Analysis.
- Srivanis, P., Whitehouse, E. &Yermo J. (2000). Regulating private pension funds structure, performance and investments: Cross country evidence. World Bank. Social Protection Discussion Paper 113.
- Tarekegne Mazengia. (2004). Managing pension funds –the case of social Security Authority of Ethiopia .Unpublished master's thesis, School of Graduate Studies, Addis Ababa University, Addis Ababa.
- Truell. (2011). *How to manage pension costs by Edmund Q Finance.*
- Urwin R. (2012). Bestpractice in investment governance for pension funds.
- Ventra LC. (2001). Corporate Governance and its application in Pension Fund Management.

Vives A. (1999). Pension Funds in Infrastructure Project Finance. (http://www.globalclearinghouse.org/infradev/assets%5C10/documents/IADB%20%28Vi ves%29%20.)[Retrived on April 2017]

Yield http://www.investopedia.com/terms/y/yield.asp#ixzz4m9CwA0nD [Retrieved on April 2017]

APPENDICES

St. Mary's University School of Graduate Studies MBA in Accounting and Finance

Dear respondents,

This Interview schedulehas been prepared by student of MBA in Accounting and Finance at St. Maryøs University in partial fulfillment of the program.

The main purpose of the study is to assess social security fund investment practice, opportunities and challenges in Ethiopia social security agency.

I hereby request you to respond this Interview schedule and give me your feedback the earliest time possible. Your genuine response is highly valuable to conduct the study and drive legitimate results. The researcher promises to keep your answers confidential and use them only for fulfilling of academic requirements. Participation in this Interview schedule is completely voluntary.

I would like to thank you in advance for your valuable and precious time and willingness to respond the Interview.

Instruction:

- \checkmark There is no need to write your name.
- ✓ Please use tick mark (c_i) in the boxes provided to choose from the options.
- ✓ For questions that demand your opinion, please try to describe honestly as per the question on the space provided.
- ✓ If you need any clarification, Please contact me through mobile 0911 64 13 04 or e-mail btaberihun@gmail.com

BerihunTassew