

# Pension Fund Management: The Case of Ethiopian Social Security Agency

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**ABSTRACT:** The research study evaluated pension fund management of Ethiopian social security agency. To attain these objectives, eleven years' financial statements were used as a secondary data and different ratio analysis was carried out to examine the status of fund management of Ethiopian social security agency. Those ratios shows that the organization current assets is very much large when compared with its current liabilities which shows the organization is in the best position to pay off all of its current liability. Again, the finding displays the asset turnover has been decreasing from time to time which shows under utilization of companies asset. In addition to this, large percentage of the asset of social security is financed by equity and small percentage is financed by debt. Lastly, the analysis puts that the organization is absorbent up to 50% of its income. That means up to 50% of them is consumed by its expenses.

Keywords: Pension, Management, Social security, social security fund, Ethiopia.

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## INTRODUCTION

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 (Jon, 2003). It is with this purpose that Ethiopian social security agency was established in 1963(Pubic Service Pension, Proclamation N. 209/1963).

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.

Regardless of this immense contribution to the society, like many other developing countries of the world, a pension system is not adequately developed in Ethiopia. Until recently, the Ministry of Finance had been collecting the contributions made by the employees of the public servants and the military. Recently, this execution is transferred to the right authority, i.e, Social Security Authority. 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. According to Urwin (2012), there is increasing evidence to support a link between superior investment performance and an institutional investor's strong management. He added that, many pension funds are beginning to realize that their management<sup>1</sup> 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 left over 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 slashed the funding ratio of Ethiopian pension funds. The pension funds now face significant funding gaps and are forced to increase premiums (as witnessed currently<sup>2</sup>) and if the funding ratio 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 management (Asaminew, 2010).

<sup>1</sup> "Management" here is defined quite broadly as *all the resources applied to investment decision-making*.

<sup>2</sup> In the past, pension was 40% from employee and 60% from employer. In 2011/12 it was grown to 50% from employee and 50% from employer and in 2012/13 it became 60% from employee and 40% employer. In 2013/14 it became 70% from employee and 30% from employer.

The purpose of this paper was to investigate the pension fund management of Ethiopian social security by properly looking at the management's efficiency in properly undertaking its activities, in improving organizational earning and in selection of the best investment opportunities so that the best fund administration of the pension scheme have been applied by the management.

Thorough investigations of Ethiopian social security pension fund management practices do have an immense utility 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 can provide guide lines for strategy and policy formulation aimed at improving the operational conditions of pension fund management. Again this paper adds to the existing literature in several ways in that it is only recently that attention paid to pension fund management in Ethiopia. Last but not least, the knowledge of the pension fund management can be a base for those who have currently expected to apply the system of pension for their employees like NGO's and private<sup>3</sup>

### *Literature*

#### **Pension Fund Management**

Pension fund management requires the investment of assets to achieve the long-term provision of funding for retirement (Urwin, 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 (Catalan, 2004).

#### *Pension fund management in advanced economies*

According to a *Preqin Special Report (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

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<sup>3</sup> Previously in Ethiopia only workers in the government institutions are under the umbrella of social security. Non governmental and private organization workers were not the beneficiaries of pension fund scheme. But starting from last year, those two institution workers are forced to contribute fixed amount to this fund in order to get benefit from the scheme.

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 (Davis, 2002)

### ***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. In **China** has National social security fund (NSSF). According to Impavido et al, (2009), Fund management has also been centralized (“pooled” in Chinese terminology) as a way to improve standards. The central government’s 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. 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).

### ***Practice of pension fund in developing countries***

According to Catalan (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 (*Catalan, 2004*)

### ***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 N. 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 is 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 organizations' and NGO's provide their employees with provident fund which is paid in lump 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 (Asaminew, 2010). 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 (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.

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.

### **Methodology**

This research has been conducted on a longitudinal base in which data collection for the research was made across time. To analyze those data concerned with pension fund management, different period data were collected and compared. Both primary and secondary data was used in this study by giving high attention to secondary data as longitudinal data is the most important for this analysis. Primary data was collected through unstructured interview made with employees and management of the organization. This will enrich the secondary data obtained from records of the organization and help to understand the research problem more. Secondary data, which is the most important component for this study, were obtained by examining various years' financial statements of the organization under study. The researcher use eleven years (1999-2011) consecutive data from the financial statements of the organization for the analysis. To analyze the data collected from eleven consecutive years of financial statements of Ethiopian social security agency, time series analysis was applied. From this ratio, percentage, table and graph were used. Proper pension fund management can be analyzed by using different financial ratios that provide information about five areas of financial performance like Short-term solvency, activity, financial leverage and profitability. Financial statements cannot provide the answers to the preceding five measures of performance. However, management must constantly evaluate how well the firm is doing, and financial statements provide useful information.

### **Data analysis and discussion**

This part is devoted to the presentation and analysis of the data collected as per the purpose and the objective of the study. In order to have relevant information about the pension fund management of Ethiopian social security, relevant documents are used as data sources. The Ethiopian pension authority, administers four pension scheme namely: old age pension, invalidity pension, sickness benefits/pension and work injury pension. In this scheme, normal retirement age is 60 years for both males and females and the scheme is applicable on any type of work. Minimum years of service to qualify for pension entitlement are 10 years. During this period the funds generated from the contributions were invested in different areas of investment like government Treasury bill, time deposit and stock. This investment need proper management in applying cost benefits analysis in the selection of investment areas. Unavailability of proper management of such programs can lead to increased incidence of poverty.

### Short-Term Solvency

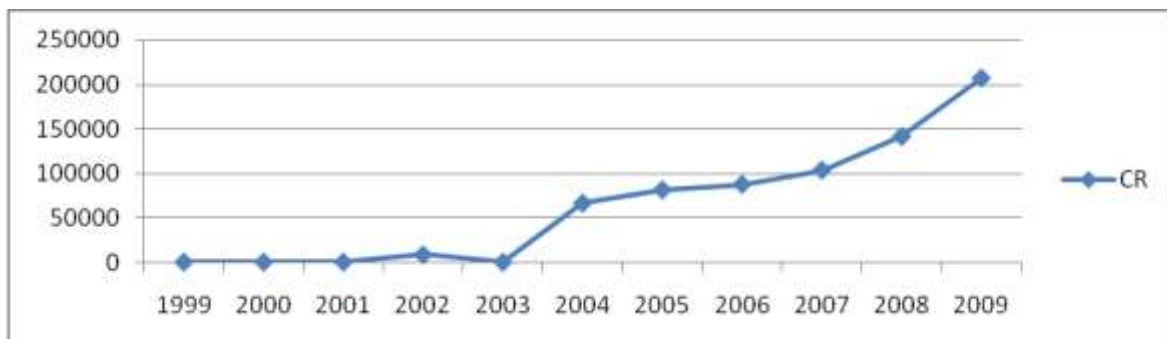
**Current Ratio:** Too low current ratio may suggest that a firm may face difficulty in paying its short term liabilities. Too high ratio indicates that too much capital is tied up in current assets and the firm may be sacrificing some returns possibilities. For this organization, the items included in the current assets are: receivables, cash and treasury bills. So as can be easily understood from the table below, the organization is very much liquid in paying back its current liability. It's very much large when compared even with standard of 2.0 birr. This shows that there are idle resource investment in current asset and this resources could have been invested somewhere else that it can get return. For the organization it is better to invest those resources for better return. Even for your surprise, this organization does not have long term liability till 2009. That means the organization have only current liability which should be paid within one year. The main reason for this is lack of financial market that makes investment very much illiquid. Because, in Ethiopia due to lack of financial market; investors should wait until maturity if they invest their money in long term asset which makes investment in long term asset boring. As a result investor does not have a willingness to borrow long term debt and invest. Due to this illiquidity nature of investment much of the organization asset are tied up in the current assets

Table4.1. current ratio or quick ratio

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Current ratio	15.75	12.15	30.84	8385.26	0	66499.80	81626.80	87796.61	5	5	

Source: financial statement of Ethiopian social security

Graph 4.1. Current ratio (CR) or acid taste ratio



### Activity

Ratios of activity are constructed to measure how effectively the firm's assets are being managed.

The level of a firm's investment in assets depends on many factors.



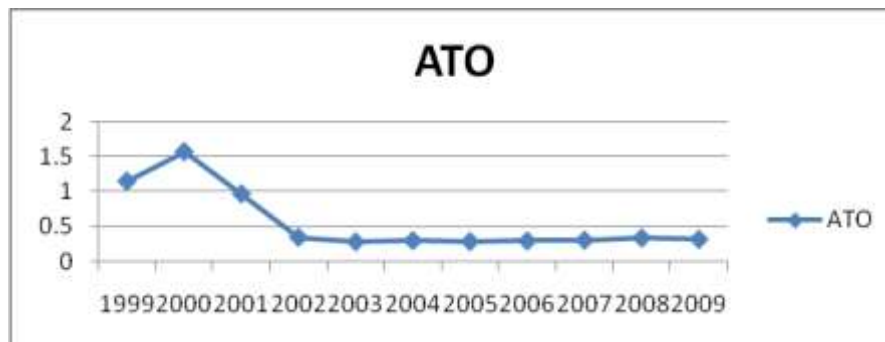
**Total Asset Turnover:** This ratio show how many birr of sales are supported by one dollar of the assets. The table shows that the organization gets that amount of birr in sales from the investment of 1 birr in fixed assets. The organization is better at the beginning that it is getting more than its investment. But, the amount of sales per one birr invested in fixed asset has decreased continuously which may be caused by different factors as fall in revenue or large investment in fixed assets. However, as the table attached at the end shows, the revenue amount is increasing from time to time. But the increase in fixed asset is very much larger than the increase in revenue that results in the fall of the ratio. We cannot say the organization is underutilizing its asset as we don't have industry average. But we conclude that the organization is not performing as it did before. The ratio of past year can be used to judge the organization performance. So it is better for the organization to increase the amount of its revenue or decrease investment in fixed asset. Nevertheless, that can only be advised if we are sure that the organization is performing below industry average.

Table 4.2.Assets turn over

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
ratios	1.150	1.57	0.97	0.34	0.28	0.30	0.29	0.29	0.30	0.34	0.32

Source: financial statement of Ethiopian social security

Table 4.2. Asset turnover ratio (ATO)



**Receivables Turnover and Average collection period (days' sales outstanding):** measures the liquidity of a firm's accounts receivable. It indicates how many times or how rapidly accounts receivable are converted in to cash during a year. The receivables turnover ratio and the average collection period provide some information on the success of the firm in managing its investment in accounts receivable. A ratio substantially lower than the average for the industry may suggest that a firm has more liberal credit policy and there is inadequate collection efforts. Again a ratio substantially higher than the industry average may suggest that a firm has more restrictive credit policy and more rigorous collection effort.



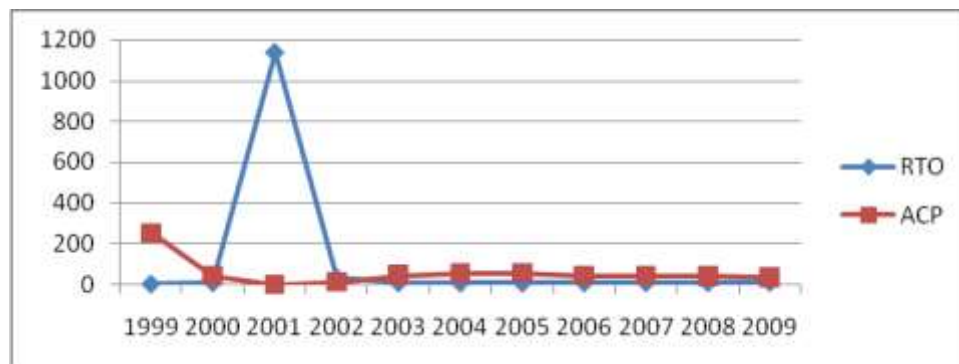
The receivable turnover section which is labeled as (RTO) shows how many times the receivable of the organization is changed in to cash. The organization is showing the better position in changing it receivable to cash from time to time. This value is more meaning full if it is explained in terms of average collection period. Again on this part the organization is continuously improving its performance in collecting its receivable from time to time. However, still we do not have industry average to compare it against and to judge whether the organization is better in collecting its receivable or not. But we can conclude that the organization is improving its performance from time to time.

Table 4.3. Receivable turn over and average collection period

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
RTO	1.44	8.12	1136.04	32.29	7.88	6.86	6.59	7.99	8.47	8.77	10.31
ACP	253.05	44.93	0.321	11.30	46.26	53.20	55.38	45.63	43.04	41.58	35.40

Source: financial statement of Ethiopian social security

Graph 4.3. Receivable turnover (RTO) and average collection period (ACP)



### Financial Leverage

Financial leverage is related to the extent to which a firm relies on debt financing rather than equity. Measures of financial leverage are tools in determining the probability that the firm will default on its debt contracts. The more debt a firm has, the more likely it is that the firm will become unable to fulfill its contractual obligations. In other words, too much debt can lead to a higher probability of insolvency and financial distress.

On the positive side, debt is an important form of financing, and provides a significant tax advantage because interest payments are tax deductible. If a firm uses debt, creditors and equity investors may have conflicts of interest.

**Debt Ratio, debt-equity ratio and Equity multiplier:** debt to equity ratio measures the proportion of total assets financed by the firm's creditors. Debt ratios provide information about protection of creditors from insolvency and the ability of firms to obtain additional financing for potentially attractive investment opportunities. **Equity multiplier** is a way of examining how a company uses debt to finance its assets. In other words, this ratio shows a company's total assets per dollar of stockholders' equity.

As we can see from the table below large part of the organization's asset is financed by equity. The organization is less dependent on debt. As has been said before, the organization is very much reluctant in borrowing funds from outside because of the lack of financial market. This impede the organization from borrowing funds from outside and invest which in turn makes the organizations' underutilization if its capacity. Only small proportion of the organizations asset is financed by outsiders. So it is better for the organization to use its capacity by borrowing funds from outside.

The intention of those all ratios are to check the level of gearing with in this organization and it shows that large percentage of the asset of the organization is financed by equity. That means the level of liability with in this organization is very much small especially long term debt. Even if this decrease the financial distress for this organization, it is using below its debt capacity. It is better for the organization to include its debt within the organization and invest in income generating activities. Having less debt ratio makes the organization to get debt easily with less cost as its default probability is less. By using this capacity the organization can borrow funds and invest in income generating activities.

The debt to equity ratio also shows the amount of debt for every one birr invested in equity. As can be seen from the table the organization has less than one birr debt for every one birr invested in the organization.

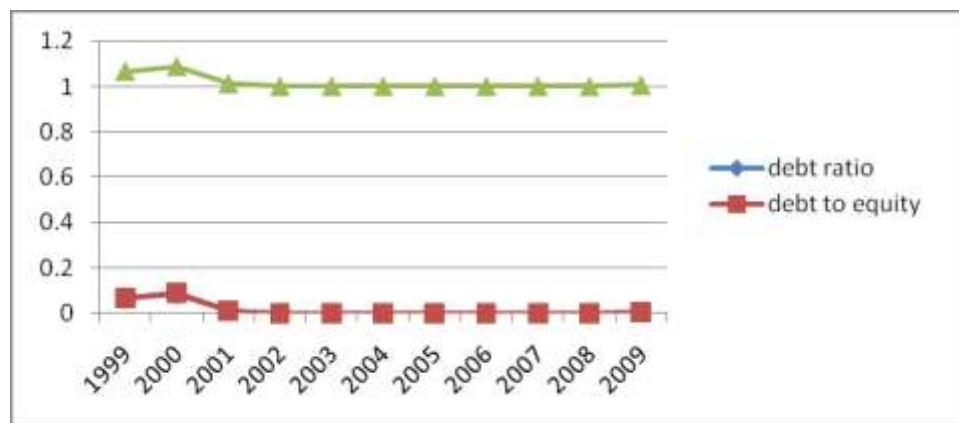
Again the equity multiplier section of the table shows the amount of the total asset of the organization available for every one dollar invested in the equity. The table shows that all the items on this section are near to one birr which shows much of the asset is invested by equity

Table 4.4. Financial leverage (debt ratio, debt to equity and equity multiplier)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
debt ratio	0.063465	0.081906	0.0115531	6.64444	0	9.19082	8.26051	8.38648	7.00839	5.6362	0.005412
equity ratio	0.067766	0.089213	0.011688	6.64488	0	9.1909	8.26058	8.38655	7.00844	5.63623	53
Equity multiplier	1.067766	1.089213	1.011688	1.000066	1	1.00000	1.00000	1.000008	1.000007	1.000005	53

Source: financial statement of Ethiopian social security

Table 4.4. Financial leverage (debt ratio, debt to equity and equity multiplier)



### Profitability

One of the most difficult attributes of a firm to conceptualize and to measure is profitability. In a general sense, accounting profits are the difference between revenues and costs. Unfortunately, there is no completely unambiguous way to know when a firm is profitable. At best, a financial analyst can measure current or past accounting profitability. Many business opportunities, however, involve sacrificing current profits for future profits. In general, a firm is profitable in the economic sense only if its profitability is greater than investors can achieve on their own in the capital markets. One of the measures of profitability is profit margin.

**Profit Margin:** The most important margin is the net profit margin. In general, profit margins reflect the firm's ability to produce a product or service at a low cost or a high price. The net profit shows the amount left over after all expenses are deducted. So the net profit margin shows from the amount

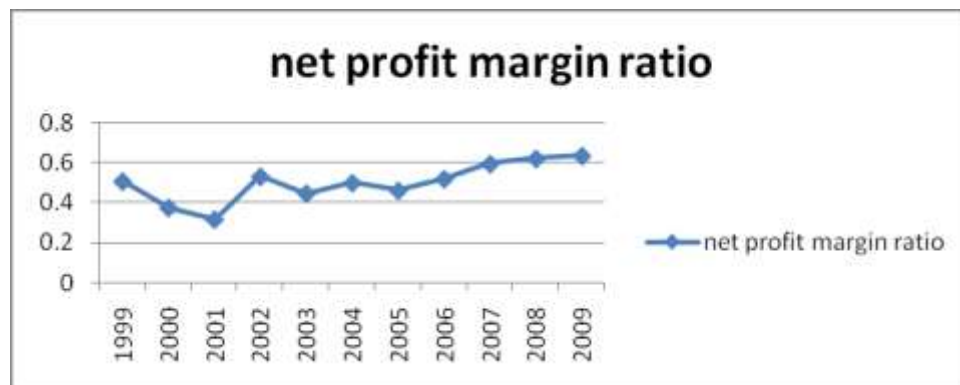
of revenue gained by the organization what percentage is left after the whole expenses are deducted. For the organization to be better, getting revenue by itself do not have any value. If the whole gained revenues are expensed, it will become the mere establishment for the organization. As a result the organization should manage its expense and decrease it to the minimum degree. As can be seen from the above table, the organization is retaining up to 50% and more of its revenue. Actually as we don't have the standard to compare with we cannot say it is good or bad. But, we can generalize from its past performance that the organization performance have decreased a little bit and now become better than the year before.

Table 4.5. Net profit margin (NPM)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
NPM	0.50	0.37	0.31	0.53	0.44	0.49	0.46	0.51	0.59	0.62	0.63

Source: financial statement of Ethiopian social security

Graph 4.5. Net profit margin



## *Conclusion and recommendation*

### *5.1 Conclusion*

Social Security is a public program designed to protect individuals and their families from income losses due to unemployment, old age, sickness or death; and to improve their welfare through public services like medical care and economic assistance. In this study, an attempt has been made to assess the extent of the management of pension fund in Ethiopia. To answer this different period data were compared against each other by taking different ratios. This is to analyses different capacity of the organization starting from short term debt paying ability of the organization to its profitability.

Under this different ratios are applied in understanding the organizations performance like Short-term solvency which shows the ability of the firm to meet its short-term obligations. In this the Ethiopian social security agency is very much liquid. That means the amounts of current asset when

compared with current liabilities are very much large and the organization can easily pay back its short term liability. But this large investment in current asset is not free of cost that the organization could have invested some of those assets somewhere else in order to generate income.

The second variable that has been included under this study is Activity. That is the ability of the firm to control its investment in assets. Under this asset turn over, receivable turn over and average collection period of the organization was analyzed. With this context we cannot say it is good or bad due to the lack of industry average. However, by looking the past experience of the organization we can say that the asset turnover has been decreased from time to time even if the amount of revenues generated is increasing. So it is advisable for the organization either to decrease investment in asset or increase revenue. To talk about receivables turnover is a little bit difficult because of industry average and the Ethiopian social security has a mix in performance that it moves up and down.

The third variable that has been included in this study is financial leverage which shows the extent to which a firm relies on debt financing. This part demonstrates that, the Ethiopian social security agency is very much averse in financing its asset by outsiders. The amount of debt is very much small when compared with its equity. The organization did not use its capacity for debt. This idle capacity could generate income for the organization and it is better for the organization to use its capacity by borrowing and investing the money in income generating activities. The main reason for this is lack financial market that the organization should hold the investment in long term assets until maturity even if it need money due to the lack of this market.

The fourth and the last but not the least variable that have been included is Profitability which is used to measure the extent to which a firm is profitable. The profitability of the organization is a function of many variables. Even if revenue is the major item in profitability it is not the only because, profit is the difference between revenues and expenses. So for the organization to be profitable it is better to control its expense. This activity is measured by using profitability ratios. The profit margin of the organization shows that the Ethiopian social security agency saves up to 50% of its income from being expensed. But as has been stated above we cannot say it is good or bad due to the lack of industry average. The organization profitability is increasing during the last few years. However the organization can use all of its debt capacity and control its expenses to get more profit

### ***Recommendations***

In view of the findings and the conclusion of the study, the following recommendations are suggested in the hope that it would help for policy interferences.

1. Since Government is responsible for Social Security, it is better for the government to make and analyze the investment area that it will benefit not only social security agency but also other member of the society.
2. Idle resources that are kept in current assets should be invested somewhere else to generate income. Those resources have a cost and it should be invested. Holding only small percentage of those resources that help us to pay current liabilities are enough
3. Again it is better for the organization if it borrows and invests in long term income generating activities that the organization can benefit from it. The organization is underutilizing its capacity. That means it can borrow large amount of money with little cost that make it the debt to be easy for the organization.
4. The government should facilitate the establishment of financial market that it will benefit the organization and other part of the society.

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