



DETERMINANTS OF FINANCIAL PERFORMANCE OF SAVING AND CREDIT COOPERATIVE UNIONS IN ETHIOPIA (THE CASE OF SOUTH WOLLO ZONE)

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Abstract

One of the most important functions of financial institutions is the provision of services such as checking and saving accounts. These accounts are the most basic financial assets that most households own and when held in insured depository institutions, provide a safe place to keep money, create opportunities to build wealth, and often serve as prerequisites for obtaining other forms of credit. Households without such transaction accounts face a number of financial disadvantages. Savings and Credit Co-operative Societies (SACCOs) in Ethiopia have been investing over the years with the objective of maximizing their wealth. Wealth maximization is a key objective of SACCOs. Lack of sufficient SACCOs' Wealth and poor financial performance has made it difficult for them to absorb their operational losses and threatened their sustainability. These have led to the loss of members' savings and limited contribution to the national domestic savings. This study tried to find out internal factors determining the financial performance of SACCO unions and their financial position trend by using the secondary data and fills the gap in the context of South Wollo Zone. The main purpose of this research is to study the determinants of the financial performance of SACCO Unions in South Wollo Zone. The research is descriptive and analytical in nature. The data used for the study was entirely secondary. The collected data were analyzed by using simple statistical analysis like percentages, tables, and financial ratios. The study considered the three years' auditing report with regard to quantitative data analysis by using financial analysis tools, such as liquidity ratios, leverage ratios, profitability ratios, and trend analysis of balance sheets from the period of 2004 to 2006 E.C. Accordingly, the result revealed that the liquidity level of the SACCO union is fairly high but in a decreasing rate. The leverage ratio of SACCOs also revealed that they are highly leveraged with respect to the maximum rate required for SACCOs. At last profitability ratios also showed, although all the SACCOs are profitable, their profitability rate is below the minimum required rate for SACCOs. The financial growth trend of most of the unions also good and they are in a position to expand their activities and the social fund from profit earning and they could pay the dividend fund to their members. Increasing the financial liquidity and profitability, reducing the leverage by enhancing loan provision and collection efforts, selling additional shares, minimizing periodic expenses and developing organizational culture by using financial ratios to effectively manage their assets are the possible recommendations.

Key words: Financial Performance, Saving, Credit, Cooperative, and Unions

Introduction

Background of the Study

High rates of investments depend on high rates of saving (Pelrine & Kabatalya, 2005). Many scholars have written on this subject but little effort has been made in determining the effect of savings in saving and credit cooperative societies (SACCOs) on members' investment culture. According to Lipsey and Chrystal (1995) a high saving economy accumulates assets faster and thus grows faster than a low saving economy. SACCOs link borrowers and savers (Tache, 2006). The savers pool their money as savings and shares against which they borrow in form of loans. SACCOs are not-for-profit organizations as their basic purpose is to help members save (Kyendo, 2011).

Tache (2006) has shown that SACCOs were invented in south Germany in 1846 by two community business leaders: Freidrich and Herman.

The first SACCO Society, in Africa, was introduced in Ghana in 1959. The SACCO was intended to assist villagers improve their economic conditions. English speaking nations were the first to adopt SACCOs. The first entrants into SACCO community include Ghana, Uganda, Nigeria, Tanzania, and Kenya. Most of the Non-English speaking nations in Africa started appreciating SACCOs in 1960s, with major influx into SACCO community in 1970s (Ng'ombe and Mikwamba, 2004).

The first savings and credit co-operative in Ethiopia was established in 1964 by employees of Ethiopian Airlines, Ethiopian Road Authority, and the Telecommunication Agency Cooperative with cooperative proclamation number 44/1961/1953E.C. The study was accompanied in South Wollo Zone which has four (4) saving and credit cooperative unions. Their presence still have encouraging effect to its members and the financial activity as a whole, but as compared with their long



establishment year they are not fully benefited from the financial market due to various factors which limit their financial performance. Therefore to assist poverty eradication program of the country and to assure national development at macro level, it is necessary to give much attention for community based financial intermediaries' expansion at a grass root level. Thus, the study aims to identify the determinants of financial performance in saving and credit cooperative unions of South Wollo Zone.

Statement of the Problem

SACCOs have multiple functions but two of them are fundamental. These are financial intermediation and investment. The most basic function of a SACCO is financial intermediation. That is bringing savers and borrowers together in a system that covers all of the costs of doing business and is useful to both parties (Pelrine, 2001).

Profitability is the secondary motive of SACCOs but it is an appropriate device for achieving long term viability and sustainability of them and the cheapest source of capital, without which no firm would attract external capital. Profits are also an important source of equity, if profits are reinvested and this may encourage financial stability (Muriu, 2011).

Studies on the determinant of the financial performance of SACCOs are few in number and cannot provide a great emphasis to the financial performance of SACCOs. For instance studies by Zerefshewa(2010) studied the determinants of saving and credit cooperatives (SACCOs) operational performance in Gondar town. This study focuses on the nature of SACCOs, challenges and prospects for the developments of SACCOs, and the determinants of operational performance of SACCOs. But it does not clearly say anything about the determinant factors of the financial performance of SACCOs.

Kifle Tesfamariam (2012) tried to see the determinants of saving behavior of cooperative members by using multiple regression models and gives a great emphasis on gender, household income; amount of loan borrowed and year of cooperative membership but this study did not say anything about factors affecting financial performance of SACCOs.

Dr.Sambasivam (2013) studied about the financial Performance analysis of GOHE cooperative Savings and Credit Union by using the most common financial ratios. This paper emphasizes the financial performance on the financial health, sign growth, efficiency of saving mobilization and the loan services strategies. The determinant factors of the financial performance of SACCO unions have not been identified here also.

Therefore, the above studies have not identified the internal determinants of financial performance and the financial position growth trend of the SACCO unions.

Even though SACCO unions are service motive, they are not charities rather they should have got their profit through time and their financial viability is crucial to provide the financial service over a sustainable period and for their healthy operation as well as the attainment of their long term goal which is poverty alleviation.

On the basis of the above concept, it is possible to raise questions about the internal factors determining the financial performance of South Wollo Zone saving and Credit Cooperative Unions (SWSACCOUs) as well as about their financial position growth trend.

Objectives of the Study

General Objective

The general objective of the study is to assess the determinants of financial performance of saving and credit cooperative unions in Ethiopia (the case of South Wollo Zone).

The Specific Objectives

1. To assess the main internal financial performance determinants of SWSACCOUs,
2. To analyze the growth trend of the overall financial position of the unions,
3. To provide the possible recommendations about the findings of this study.

Research Questions

This study addressed the following questions:

1. What are the main internal factors determining the financial performance of SWSACCOUs?
2. What seems like the financial position growth trend of SACCO unions?



Scope of the Study

This study was taken place in South Wollo Zone SWSACCOUS South Wollo Zone, and Amhara regional state. The study investigated the determinants of financial performance SACCOs using SWSACCOUs as the case study. The study covered on the period from 2010 up to 2014.

Significance of the study

This research was conducted to identify the determinants of financial performance of SACCOs. The survey will be conducted in South Wollo Zone. The findings of this research will help the co-operative officials, members and even the Federal Cooperative Agency in designing SACCOs' growth strategies and evaluating the impact of the selected strategy on growth. The research will also be an eye opener for future researchers in this area who may want to research on best strategies that the country may adopt to develop the SACCOs in Ethiopia. The study will assist Government and its agencies in coming up with policies through the SACCO regulatory authority, FCA.

Limitations of the Study

There were some problems facing on this study. Moreover, getting reliable data was difficult due to unavailability of well documented and organized secondary data in the selected cooperatives. Additionally, most of the documents that are concerned with SACCO unions are written in Amharic. To translate in to the required instruction language (English) takes longer period. It is very important to note that these limitations did not have any significant interference with the outcome of the study. In order to avoid such inconveniences, the researcher got work permission from the office and used all leisure time to collect the data.

Related Literature Review

Review of Related Theoretical Studies

Concept of Cooperatives in General and SACCOs in Particular

According to Bharadwaj (2012), Cooperative was founded from Latin word "co-operari" where 'co' means together and 'operari' means working together. Working together for member is the initial concept of cooperatives. The Cooperative is a member centered business.

Their principal products are savings and credit, however some offer money transfers, payment services and insurance. SACCOs sometimes join together to create second-tier associations for the purposes of building capacity, liquidity management and refinancing; these second-tier associations can play a useful role in monitoring (CGAP, 2005).

Credit: The terms loan and credit are used interchangeably. The study adopts the credit definition of credit as an arrangement in which a lender gives money to a borrower, and the borrower agrees to repay the money, usually along with interest, at some future point(s) in time (Aryeetey, 1995).

Saving: A Savings is a program designed to encourage savings through small but regular deposits or automatic deduction from salaries or wages. Savings and credit scheme aims at poverty alleviation to the poor and low income families (Peace, 2011).

Review of Related Empirical Studies of SACCOs

The size of loan to members relative to total asset was positive and highly significant predictor of performance, confirming the a priori premise that loan is the most productive asset of any financial institution. Similarly the proportion of equity capital relative to asset was positive and significant, indicating that capital structure is important. High growth in assets and loan to members is related to high financial performance. The ratio of operating expenses to total asset was negative and highly significant indicating that better cost management could improve performance. Further studies should look at organization, in particular the impact of top management, effectiveness of planning and skill in financial performance of SACCOs (Liston, 2008).

Though, the informal sector is the major rural finance providers in Ethiopia, the financing is only meant to address short term demand for finance such as consumption during cash shortage and for other emergencies which neglects productive investment (Kalifa, 2006).

Problems frequently occur in SACCOs due to one or more of the following reasons; lack of clear and proper rules separating management from decision making, unqualified personnel in management, inadequate managerial competitiveness, failure of membership and boards to exercise fiduciary responsibility and the one member one vote system (Odera, 2012).



Financial Institutions' Performance Indicators

Profit is the ultimate goal of commercial banks. All the strategies designed and activities performed thereof are meant to realize this grand objective. However, this does not mean that commercial banks have no other goals. Commercial banks could also have additional social and economic goals. To measure the internal profitability of financial institutions, there are variety of ratios used, of which Return on Asset, Return on Equity and Net Interest Margin are the major ones from the internal (Murthy and Sree, 2003; Alexandru et al., 2008).

Return on Equity (ROE): ROE is a financial ratio that refers to how much profit a company earned compared to the total amount of shareholder equity invested or found on the balance sheet. ROE is what the shareholders look in return for their investment. A business that has a high return on equity is more likely to be one that is capable of generating cash internally. Thus, the higher the ROE the better the company is in terms of profit generation. It is further explained by Khrawish (2011) that ROE is the ratio of Net Income after Taxes divided by Total Equity Capital. It represents the rate of return earned on the funds invested in the bank by its stockholders. ROE reflects how effectively a bank management is using shareholders' funds. Thus, it can be deduced from the above statement that the better the ROE the more effective the management in utilizing the shareholders capital.

Return on Asset (ROA): ROA is also another major ratio that indicates the profitability of a bank. It is a ratio of income to its total asset (Khrawish, 2011). It measures the ability of the bank management to generate income by utilizing company assets at their disposal. In other words, it shows how efficiently the resources of the company are used to generate the income. It further indicates the efficiency of the management of a company in generating net income from all the resources of the institution (Khrawish, 2011). Wen (2010), state that a higher ROA shows that the company is more efficient in using its resources.

Net Interest Margin (NIM): NIM is a measure of the difference between the interest income generated by banks and the amount of interest paid out to their lenders (for example, deposits), relative to the amount of their (interest earning) assets. It is usually expressed as a percentage of what the financial institution earns on loans in a specific time period and other assets minus the interest paid on borrowed funds divided by the average amount of the assets on which it earned income in that time period (the average earning assets). The NIM variable is defined as the net interest income divided by total earnings assets (Gul et al., 2011).

SACCOs Internal Financial Factors

CAMEL framework often used by scholars to proxy the bank and other financial institution specific factors (Dang, 2011). CAMEL stands for Capital Adequacy, Asset Quality, Management Efficiency, Earnings Ability and Liquidity. Each of these indicators is further discussed below.

Capital Adequacy: Capital is one of the company specific factors that influence the level of SACCOs' profitability (Sangmi and Nazir, 2010).

Asset Quality: The ban SACCOs' asset is another SACCO specific variable that affects the profitability of a SACCO. It includes among others current asset, credit portfolio, fixed asset, and other investments. Often a growing asset (size) related to the age of it (Athanasoglou et al., 2005). More often than not the loan of a SACCO is the major asset that generates the major share of the banks income. Loan is the major asset of commercial banks from which they generate income (Sangmi and Nazir, 2010).

Liquidity Management: A concern for many nonprofits is their ability to pay their obligations on time (liquidity). Today, in for-profit companies, liquidity is assessed by looking at free cash flows. This is often measured by: Cash from Operating Activities + Cash from (Non discretionary) Investments.

Since the Form 990 does not require a cash flow statement, it often not possible to compute the free cash flows. Instead, analysts compute more traditional liquidity measures as follows:

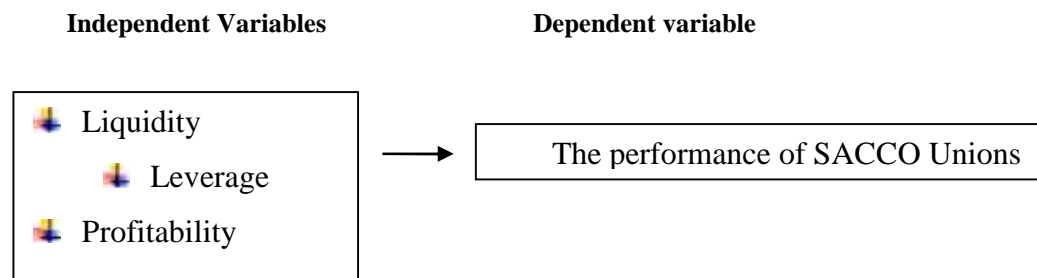
Current Ratio is defined as: Current Assets/ Current Liabilities, where current assets are the assets that will be converted into cash in the next 12 months, and current liabilities are the debts that become due in the next 12 months. It is measure of a nonprofit's ability to pay its obligations on time.

Net Working Capital is defined as Current Assets- Current Liabilities. This is an alternative method of assessing a nonprofit's ability to pay its short-term obligations. (Said and Tumin, 2011).

Conceptual Frame Work

Conceptual framework involves forming an idea about the relationship between variables in the study and showing relationship graphically or diagrammatically (Mugenda, 2003).

To measure the financial performance of financial institutions in Ethiopia, ROA were applied as the dependent variables because the Financial Reporting Standards recommends the use of ROA and ROE as measures of profitability rather than financial self-sufficiency (FSS) and operational self-sufficiency (OSS) (Muriu, 2011).



Research Methodology

Research Design: For objective of this study, the researcher employed the survey study as a research design mainly it is cross sectional.

Population, Sample Size and Sampling Technique

Population : Three purposely selected SACCO Unions will be the total population of this study.

Sample size and Sampling Technique: In South Wollo Zone, there are 4 SACCO unions. Three of the unions have three years consecutive audit reports. But one of the unions is established in 2014 and does not have enough financial statements to evaluate it. Therefore, the study deals with only 3 SACCO Unions which are properly audited in the consecutive three years (2004, 2005, and 2006 E.C). Due to this reason, the three SACCO unions were selected by purposive data sampling method.

Types, Data Sources, and Data Collection Methods

Types and Sources of Data:For this research the quantitative data was collected in the area of the determinant of SACCO union's financial performance. Secondary sources (books articles, journals, SACCO unions' audit reports and other related publishes) were considered as a source of data for this study.

Data Collection Methods and Instruments: The employed data collection method is survey study. Observation is the data collection instrument. The secondary source also was collected from books, articles, journals, magazines, audit reports and other related publishes.

Data Collection Procedures

Getting permission from the organization was the first task of the researcher; second, the observation of the financial statements or audit reports was done; third, taking the relevant data; last, collecting and analyzing of the data will be implemented.

Method of data analysis: The collected data were analyzed by using liquidity analysis, leverage ratio analysis, and profitability analysis, tables and percentages.

Results and Discussions

Financial Performances of SACCO Unions (Ratio Analysis)

Common ratios used to analyze the four areas of financial performance can be found in most basic financial textbooks and were developed to analyze a wide variety of businesses and most of these ratios are applicable to the cooperative form of businesses. Financial ratios were calculated from the audit reports of the union (See Appendix I).

Liquidity Ratio Analysis

Liquidity ratios measure the ability to fulfill short-term commitments with liquid assets. Such ratios are of particular interest to the cooperative's short-term creditors. These ratios compare assets that can be converted to cash quickly to fund maturing short-term obligations. The current ratio and the quick ratio are the two most commonly used measures of liquidity. For most cooperatives, these two ratios provide a good indication of liquidity (Yemane, 2011).

Current Ratios: The current assets are those assets, which are easily converted in to cash to meet the obligations which mature within a short period, namely a year. The results of assets to current liabilities ratio is considered one among the key factors to decide the cooperatives short- term financial policies. The generally accepted current ratio is 2:1 (Nevue, 1985). According to Nevue, the higher the ratio the faster creditors can expect payment. A higher ratio can also indicate excess inventory, too much idle cash or a very lenient to meet current obligations.

$$\text{Current Ratio} = \frac{\text{Total Current Asset}}{\text{Total Current Liability}} \dots\dots\dots 1$$

The Current ratios of unions were presented in table 1(appendix I). Table 1 indicates the current ratios of Dessie Amba, Mekaneselam, and Wubaye SACCO unions are 1.73:1, 1.15:1, and 1.18:1 respectively in the year 2004 E.C. This indicates that the current ratio is below the industry standard of 2:1 in the same year. It means that the unions are not capable of paying their short term obligations. In the year 2005 E.C. the current ratio of Dessie Amba, Mekaneselam, and Wubaye SACCO unions are 1.59:1, 1.27:1, and 1.74:1 respectively. This indicates that the financial position of the unions was, again, unsatisfactory to fulfill its short term obligation in the respective year. In 2006 E.C. the current ratios of Dessie Amba, Mekaneselam, and Wubaye SACCO unions are 1.73:1, 1.29:1 and 2.61:1. Here again for the third consecutive year their ability to payout their current obligations is below standard. But the current ratio trend of each SACCO union is increasing except Dessie Amba SACCO union where the ratio declined from 1.73 in 2004 E.C. to 1.59 in 2005 E.C. By considering the three years average current ratio of each SACCO union, Wubaye SACCO has the better ability to satisfy its current obligations with its current assets.

USAID (2005) provides the standard current ratio for SACCOs to be greater or equal to a 1.2:1 ratio. Accordingly, all SACCO unions considered in the study have been found in a better position to pay their current obligations. This implies that the financial position of the unions were satisfactory to fulfill their short term obligation in the respective years.

The Average Liquidity Ratio Analysis of the Three SACCOs

To analyze the general financial performance of the selected unions, table 2(appendix I) is developed. It combines the three SACCO unions' Liquidity ratio on average basis. Table 2(appendix I) shows that the average current ratio of the SACCOs is above the required standard for saving and credit cooperatives i.e. above the required 1.2:1 ratio. In addition, the average current ratio trend throughout the years has shown increasing. This shows that the SACCOs are developing their financial strength to settle the current debts they have. Moreover, their performance encourages creditors to be willing to lend more money to SACCOs as their margin of safety guarantees and others that are interested in SACCO's performance to give more attention to them.

Generally, all SACCO unions which have been selected to this study have high current ratio to cover their current or short term liability.

Leverage Ratio Analysis of SACCOs

Whenever a cooperative finance a portion of asset is related with any type of financing such as debts, the cooperative is said to be using financial leverage. According Birmingham and Houston (1998) financial leverage management ratio measures the degree to which a firm is employing financial leverage. According to these authors, of the several types of financial leverage ratios, total debt ratio is commonly used. But to scrutinize the leverage of the unions: total debt ratio, debt - equity ratio and capital adequacy ratios are commonly employed.

Debt Ratio: A debt ratio of 0.5 is often considered to be less risky. This means that the company has twice as many assets as liabilities. Or said a different way, this company's liabilities are only 50 percent of its total assets. Table 3(appendix I) shows except Dessie Amba SACCO union all the SACCOs have a total debt ratio above the required 50 per cent standard. Therefore, the two SACCO unions can be viewed risky as compared to Dessie Amaba Saving and Credit Cooperative union though it's saving mobilization and borrowing activities can be questioned as it is leveraged low.

$$\text{Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Asset}} \dots\dots\dots 2$$

Debt - Equity Ratio: This ratio measures the amount of finance supplied by creditors versus the amount provided by member patrons. As it is cited in Yemane (2008) the ratio above 1.1:1 is generally accepted as a desirable objective but, at the same time, should not exceed to a 3 to 1 ratio (USAID, 2005). According to this range of required debt-equity ratios Dessie Amba SACCO union is the only fairly leveraged cooperative union. Mekaneselam and Wubaye SACCO unions are leveraged 3.96 and 4.89 respectively during the years studied. These figures show that SACCOs have used more borrowings and members' are saving to finance their operation than equity financing.

$$\text{Debt Equity Ratio} = \frac{\text{Debt}}{\text{Equity}} \dots\dots\dots 3$$

Capital Adequacy Ratio: This ratio measures the extent to which SACCO member patrons own of all the assets of their SACCO unions. USAID (2005) tells that SACCO unions can be regarded as having good capital adequacy ratio if it is greater than 50%. Accordingly, the three years average capital adequacy ratio of Mekaneselam and Wubaye SACCO unions are 0.21 and 0.17 respectively which are 42 and 34 per cent of the minimum required standard of 50%. That means these SACCOs were not able to raise equity finance to match their debt. But Dessie Amba SACCO union is the better of the three with a three years average capital adequacy ratio of 0.44 during the years under study. Its capital adequacy ratio makes up 89 % of the required minimum standard i.e. of the 50% ratio. To sum up, the capital adequacy ratio of all the selected unions is below 50 per cent and implies that the unions' member patrons own less of their SACCOs assets.

$$\text{Capital Adequacy Ratio} = \frac{\text{Equity}}{\text{Total Assets}} \dots\dots\dots 4$$

The Average Leverage Ratio of the Three SACCO Unions

Table 4(appendix I) shows that the average computed solvency measure ratios of each year are below the required standard. The debt ratio of the SACCOs through 2004 to 2006 is 0.79, 0.77, and 0.78 which much above the required 50 per cent rate. During the same fiscal years the yearly average debt-equity ratios of the SACCOs are computed 3.78, 3.42 and 3.47 which is much higher than the required maximum 3 to 1 ratio. Again, during the same years the yearly average capital adequacy ratios of the SACCOs are below the minimum required 50 per cent ratio. Therefore, during these years solvency of the SACCOs is found less attractive.

Profitability Ratio Analysis

Profitability is the net effect of a number of policies and decisions. Profitability ratios measure how effectively a firm's management was generating profits on sales, total assets, most importantly stockholders' investment (Birmingham and Houston, 1998). These authors also suggested that the most commonly used profitability ratio refers to the return on total asset; return on equity, operating self sufficiency, and net profit margin.

Return on Asset (ROA): The profitability ratios demonstrate how well the firm is making investment and financing decisions. According to William et al. (2003) firms need to earn return on their asset that enables them to pay the interest of the money they borrowed i.e. they need to have return on their asset, which is equal or better than the interest rate of the money they borrowed.

$$\text{Return on Asset} = \frac{\text{Net Income}}{\text{Total Asset}} \dots\dots\dots (5)$$

According to USAID (2005), 5% ROA is advisable to earn return their asset that enables them to pay the interest of the money they borrowed. One can observe from table 6 (appendix I), the profitability ratios of the unions under investigation were fluctuating in the past 3 years. The earning of unions under investigation in 2004 E.C, the return on asset ratio was 3%, 2%, and 3% which was scored by Dessie Amba and Wubaye and Mekaneselam SACCO union respectively (Appendix I table 5). In 2005 E.C the highest ROA ratio was 5% which was scored by Mekaneselam and the lowest was which was scored by Wubaye union. In 2006 E.C, the highest was 4% which was scored by Mekaneselam and Wubaye and the lowest was 3% which was scored by Dessie Amba SACCO union (Appendix I table 5).

Generally, the return on asset ratio of all SACCO unions of this study was below the known standard (5%). This implies that the unions have not got a return which is equal or better than the interest rate of the money they borrowed.



Return on Equity (ROE): indicates the higher ROE ratio, the better position a SACCO is in forgetting debt financing. The given standard to SACCOs by USAID is 20% of equity financing.

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Total Equity}} \dots\dots\dots(6)$$

The appendix I table 6 shows, the Owners' Equity ratio of Dessie Amba SACCO union was 6%, 6% and 7% in the year of 2004, 2005, and 2006 E.C respectively. The Owners' Equity ratio of the Mekane-selam SACCO union was 13%, 19% and 16% in the year of 2004, 2005, and 2006 E.C respectively. The Owners' Equity ratio of the Wubaye SACCO union was 14%, 25% and 27% in the year of 2004, 2005, and 2006 E.C respectively.

This analysis implies that owner members own less proportion of the union's assets. Most of the selected SACCO unions have not a better financial performance on return on equity.

Operating self sufficiency: Operational self sufficiency indicates whether revenues from operations are sufficient to cover all operating expenses. The breakeven point of the unions' operation is 115 %.

$$\text{Operating Self Sufficiency} = \frac{\text{Total Operatng Income}}{\text{financial Expense} + \text{LO} + \text{Operatng Expense}} \dots\dots\dots(7)$$

As the table 5 of appendix I shows, the operating self sufficiency trend of Dessie Amba SACCO Union (1.31, 1.42, and 1.60 respectively) is improved at the three consecutive years but Mekaneselam and Wubaye SACCO Unions' operating self sufficiency ratio is erratic.

Net profit Margin: The net profit margin measures the percentages of each sales in birr remaining after all costs and expenses, including interest and taxes have been deducted.

$$\text{Net profit Margin} = \frac{\text{Net Income}}{\text{Total Sales}} \dots\dots\dots(8)$$

As it can be seen from appendix I table 6, the Net profit Margin has contributed birr 0.37, 0.38 and 0.37 at Dessie Amba, 0.49, 0.65, and 0.57 at Mekaneselam, 0.26, 0.40, and 0.40 at Wubaye in 2004, 2005, and 2006 E.C respectively for each birr sales. This was also showing a fluctuating trend due to the fluctuating performance of the unions and hence the Net profit margin fluctuates between 0.37 and 0.38 in Dessie Amba union, and 0.49 and 0.65 in Mekaneselam union but it is stagnant in Wubaye SACCO union.

Average Profitability Ratio Analysis of the Three SACCO Unions

The average profitability ratio of the three unions is computed as it is depicted from appendixI table 7. In 2004 E.C, the average return on Asset, return on equity, operating self sufficiency and net profit margin of the unions under investigation was 3%, 84%, 187%, and 37% respectively. Correspondingly, in 2005 and 2006 E.C the average ratio of ROA was nearly constant but ROE, OSS and NPM decreased.

Generally, even though the SACCOs unions have a profit; the average profitability ratio of most of the unions' is decreased from year to year.

The Financial Position Growth Trend of the Three SACCO Unions (2004-2006 E.C)

The trend analysis of the balance sheet of the SACCO unions was presented in table7 (appendix I). According to the result demonstrated in Table 7 below, Dessie Amba was relatively increased its CA, FA, TA, LIAB, and OEQ in the year 2004 to 2006 respectively. This indicates that the financial position of Dessie Amba SACCO union is healthy for the three consecutive years. Besides, the CA, TA and LIAB of Mekane-selam SACCO union is varied across the study period. The current assets of the unions were fluctuating throughout the study year. Thus, it implies that the union was not able to pay some of its obligation during 2005 E.C year. Table 7 (appendix I) shows that the fixed assets of the union were varying across the study period. Wubaye union was decreased in the year 2005 to 2006 respectively. Besides, almost all unions were

increased their fixed assets in a limited variation the year 2004 to 2005. This indicates that purchasing power of the union was increased during the study period.

Generally, the financial growth trend of most of the unions is good and they are in a position to expand their activities and the social fund from profit earning and they could pay the dividend fund to their members. Their purchasing power also increased from year to year.

Conclusions and Recommendations

Conclusions

The contribution of SACCO's in Ethiopian economy cannot be ignored. However, this contribution has been affected in the recent past by some financial factors, which influence SACCO performance. In order to survive negative shocks and maintain a good financial stability, the financial managers and policy maker should identify the determinants of the financial performance of SACCOs. However, studies on the financial performance of cooperatives at regional level are not undertaken so far, in view of realizing this gap; the researchers are motivated to undertake this research study to analyze the financial performance of SACCO unions.

Descriptive research design and the secondary data were used to investigate the internal financial performance determinants and the overall financial position growth trend of SACCOs. Thus, this study analyzes the determinants of the financial performance of the three SACCO unions in South Wollo Zone of Amhara regional state over the period 2004, 2005 and 2006 E.C. liquidity ratio, leverage ratio, profitability ratio, and balance sheet trend analysis are the tools employed to analyze the collected secondary data of the three purposely selected unions.

Through analyzing the annual audit report of the SACCO unions, the following findings are identified:

The current Ratio was employed to analyze the liquidity of the SACCO the unions. Even though the liquidity ratio of the unions seems like bellow the profit oriented businesses' standard ratio that is 2:1, all SACCO unions of this study have been found in a better position to pay their current obligation based on the SACCO unions' standard that is 1.2:1. This implies that the financial position of the unions were satisfactory to fulfill their short term obligation in the respective years.

The long term solvency of the SACCOs was measured by three different leverage ratios: debt, debt-equity and capital adequacy ratios. Except Dessie Amba SACCO union the other two unions are found having a higher debt ratio than the required maximum standard Similarly, Dessie Amba SACCO is found fairly leveraged with reference to the debt-equity ratio. The other two SACCO unions have much higher ratios than the maximum required rate of the 3 to 1 ratio. In addition, capital adequacy of Mekane selam and Wubaye SACCO unions' is computed to be very much lower than the required 50% ratio but Dessie Amba performed good during the same years of study. To conclude, evaluated using the three solvency measures Dessie Amba SACCO union has the better long term liquidity though it should consider it needs to re-consider its business operation so as to further improve its solvency.

The profitability ratio of the SACCO unions was measured by return on asset, return on equity, operating self sufficiency, and net profit margin. Regarding to the return on asset of the SACCOs under the study period, the unions did not perform good or less (3-4%) than the minimum required rate (5%). The selected SACCO unions have not done a better financial performance on return on equity except Wubaye SACCO union whose ROE has increased and scored above the given standard in the year of 2005 E.C & 2006E.C. Additionally, The operating self sufficiency ratio of the selected SACCO Unions' of the study has an erratic operating self sufficiency ratio. Finally, the Net profit Margin was found in a fluctuating trend. To sum up, even though the SACCO unions were profitable during the study periods, the average profitability ratio trend has shown decreasing and fluctuating through the years.

The financial growth trend of most of the unions is good and they are in a position to expand their activities and the social fund from profit earning and they could pay the dividend fund to their members.

Recommendations

Based on the findings and the conclusions arrived, the following possible recommendations are forwarded:

1. Although the current ratios of the SACCO unions are acceptable, the 2006 E.C. current ratio of Wubaye SACCO union is more than double. Therefore, the other two SACCOs have to maintain their liquidity but Wubaye SACCO union has to thrive to distribute more loans to borrowers or find some other alternative investment project so as to maintain its previous years' liquidity trend.
2. Second, since the leverage of the SACCO unions is high they should reduce it by selling additional shares for existing members and by inviting non-members to become members of the SACCOs.



3. Third, since the profitability ratios of the SACCOs are lower the respective SACCOs need to increase their profitability through enhancing loan provision and collection efforts, minimizing periodic expenses and developing organizational culture by using financial ratios to effectively manage their assets.

References

1. Abera, A. (2012). Factors Affecting the Performance of Micro and Small Enterprises in Arada and Lideta Sub Cities. Addis Ababa University, Addis Ababa: Ethiopia.
2. Aredo, D. (1993). Semi Formal Financial Sectors in Ethiopia: A Study of the Iqub, Iddir, and Savings and Credit cooperatives. AERC Research Paper 21 African Economic Research Consortium: Nairobi, October, 1993.
3. Aredo, D. (1997). The Village Economy and Indigenous Financial Institutions: Theory & Evidences from Rural Ethiopia. Proceedings of the 3rd Conference of the Agricultural Economics Society of Ethiopia 2-3 October, 1997, Addis Ababa.
4. Aryeetey E. (1995). Filling the Niche- Informal Finance in Africa. Nairobi: East African Educational Publishers Ltd.
5. Associates in Integrated Development (AFRICA) Limited (2007). Refresher Course for RUSACCO Union Managers in Ethiopia. Addis Ababa: AEMFI.
6. Bharadwaj. B. (2012). Roles of Cooperatives in Poverty Reduction. A Case of Nepal Administration and Management Review, 24(1): P 124.
7. Birhane, K. (2008). The status of RUSACCOs in Ethiopia Report. Work shop held on 22-24 July 2008, Addis Ababa: <http://www.africa.org/publications.RUSACCOs.doc>. (Accessed on march.10/2015).
8. Bringham, E.F. and J.F. Houston, (1998). Ratio Analysis. In: Dryden Press (ed.), Fundamentals of Financial Management. The Dryden press, Orlando, Florida, U.S.A.
9. CGAP. (2005). Working with Savings & Credit Cooperatives. Donor Brief No.25 retrieved December 10, 2013 from: (<http://www.cgap.org/gm/document1.9.2578/FN37.pdf>).
10. Elser, L. Hannig, A., Wisniewski, S.E. (1999). Comparative Analysis of Savings Mobilization Strategies. Washington D.C: CGAP
11. Ethiopian Negarit Gazeta. (1998). Cooperative Procl.No. 147/1998. Addis Ababa: Ethiopia.
12. EU. (2011). The Role of Cooperatives, SACCOs and Traders in Value Chain Development. Borana Zone: Ethiopia.
13. FAO (2002). The group savings resource book .Rome, Italy
14. FDRE (1998). Cooperative society's proclamation No. 147/1998: Addis Ababa.
15. Kalifa, A. (2006). The experience of Oromia credit and saving Share Company in growth management. Addis Ababa, Ethiopia paper published on AEMFI proceedings of the bi-annual conference of microfinance development in Ethiopia, Mekelle, Tigray.
16. Liberand, B. (2007). Measuring the performance of agricultural cooperatives: Rural Business and cooperative programs, USDA, Washington, D.C.
17. Lipsey, R.G., & Chrystal, K.A., (1995). An Introduction to Positive Economics: 8th Edition. Oxford: Oxford University Press.
18. Liston, N. (2008). Determinants of financial performance in savings and credit cooperative societies. Nairobi.
19. Morduch, J. (1999), "The Microfinance Promise": Journal of Economic Literature, 37, p. 1569-1614.
20. Mugenda, M. (2003). Research Methods, Qualitative and Quantitative / approaches: African Centre for Technology Studies, Nairobi, Kenya.
21. Nevue, R.P. (1985). Fundamentals of Managerial Finance: 2nd edition: South- Wester Publishing Co., Cincinnati, Ohio.
22. Odera, O. (2012). Corporate Governance Problems of Savings, Credit and Cooperative Societies: International Journal of Academic Research in Business & Social Sciences, 2(11): p 1.
23. Peace, K. (2011). Small Savings and Credit Schemes and Financial Accessibility in Rural Areas: Makerere University: Uganda.
24. Pelrine (2001). Selected Readings for the Promotion and Management of Saving and Credit Cooperatives: VOCA/ Ethiopia.
25. Pelrine, R. & Kabatalya, O. (2005). Savings Habits, Needs and Priorities in Rural Uganda: Kampala: USAID/ Rural SPEED.
26. Tache G.M., (2006). Sustainable Sacco Development, Rural Savings Promotion & Enhancement of Enterprise Development (Rural Speed): USAID/Uganda (<http://pdf.usaid.gov/pdf docs/PNADK962.pdf>).
27. Taimni, K.K. (1997). Cooperatives in the New Environments: A study of the Role of the Registrar of Cooperative Societies in Selected Countries in Asia, Rome: FAOUN.
28. Williams, M. E. & Hudson, S. (1998). Building the savings and assets of lower-income consumers: Examples from community development credit unions: Chicago, Illinois: Woodstock Institute.

Appendix: Tables of Financial Ratios
Appendix I

Table 1: Analysis of Liquidity Ratio of the SACCO Unions (2004-2006 E.C)

No	Name of unions	Year (E.C)	Current Ratio(CR) = CA/CL(Standard >1.2:1)	Average Current Ratio
1	Dessie Amba	2004	1.73	1.68
		2005	1.59	
		2006	1.73	
2	Mekaneselam	2004	1.15	1.24
		2005	1.27	
		2006	1.29	
3	Wubaye	2004	1.18	1.84
		2005	1.74	
		2006	2..61	

Source: Audit Report of the Unions 2004-2006 (E.C) years

Table 2: Average Liquidity Ratio Analysis of the SACCO Unions (2004-2006 E.C)

No	Standard of Current Ratio USID(2005)	Average Current Ratio(ACR) which is derived from table 1
2004	>120%	1.35
2005	>120%	1.53
2006	>120%	1.88

Source: Audit Report of the Unions 2004-2006 (E.C) years

Table 3: Analysis of Leverage Ratio of the Unions (2004-2006 E.C)

No	Name of unions	Year	Debt Ratio(DR) = TL/TA	Debt Equity Ratio(DER)= TL/ TE	Capital Adequacy Ratio (CAR)=TE/TA
1	Dessie Amba	2004	0.53	1.18	0.45
		2005	0.33	1.42	0.43
		2006	0.30	1.23	0.45
2	Mekaneselam	2004	0.85	5.65	0.15
		2005	0.76	3.11	0.24
		2006	0.76	3.12	0.24
3	Wubaye	2004	0.81	4.30	0.19
		2005	0.84	5.14	0.16
		2006	0.84	5.22	0.16

Source: Audit Report of the Unions 2004-2006 (E.C) years

Table 4: The Average Leverage Ratio of the Three SACCO Unions

Year (E.C)	Average Debt Ratio	Average Debt Equity Ratio	Average Capital Adequacy Ratio
2004	0.73	3.71	0.26
2005	0.64	3.22	0.28
2006	0.63	3.19	0.28

Source: Audit Report of the Unions 2004-2006 (E.C) years

Table 5: Profitability Ratio Analysis of the SACCO Unions (2004-2006 E.C)

No	Name of unions	Year (E.C)	Return on Asset (ROA) = NI/TA	Return on Equity (ROE)= NI/ TE	Operating self sufficiency= TOI/(TFE+TLO+TOE)	Net Profit Margin(NPM) = NI/Sales
1	Dessie Amba	2004	0.03	0.06	1.31	0.37
		2005	0.03	0.06	1.42	0.38
		2006	0.03	0.07	1.60	0.37
2	Mekaneselam	2004	0.02	0.13	1.95	0.49
		2005	0.05	0.19	2.50	0.65
		2006	0.04	0.16	2.31	0.57
3	Wubaye	2004	0.03	0.14	2.34	0.26
		2005	0.04	0.25	3.08	0.40
		2006	0.04	0.27	2.49	0.40

Source: Audit Report of the Unions 2004-2006 (E.C) years

Table 6: Average Profitability Ratio Analysis of the Three Unions (2004-2006 E.C)

Year (E.C)	Return on Asset ROA	Return on Equity (ROE)	Operating Self Sufficiency(OSS))	Net Profit Margin(NPM)
2004	0.03	0.84	1.87	0.37
2005	0.04	0.17	2.33	0.48
2006	0.04	0.17	2.13	0.45

Source: Audit Report of the Unions 2004-2006 (E.C) years

Table 7: Trend Analysis of Balance Sheet of the three SACCO Unions (2004-2006 E.C)

Name of unions	Base Year 2004	Particulars				
		Balance Sheet				
		CA)	FA	TA	LIAB	OEQ
Dessie Amba	2004	1,634,838.32	37,005.51	1,671,843.83	885,661.81	752,183.82
	2005	2,614,563.56	89,151.60	2,703,715.16	1,584,595.47	1,119,119.69
	2006	3,503,001.36	167,712.88	3,670,714.24	2,024,703.36	1,646,010.88
Mekane-selam	2004	5,665,608.75	16,589.91	5,682,198.66	4, 827688.49	854,510.17
	2005	4,800368.52	44,582.5	4,883,486.4	3,695,548.32	1,187,938.08
	2006	6,605,085.72	167,877.96	6,772,963.68	5,130,563.12	1,642,400.56
Wubaye	2004	4,889,888.99	41,411.36	4,931,300.35	4,001,097.06	930,203.29
	2005	9,260,747.46	86,428.43	9,347,175.89	7,825,307.39	9,464,609.39
	2006	14,966,777.36	62,777.21	15,029,554.57	12,613,950.07	2,415,604.50

Source: Audit Report of the Unions (2004-2006 E.C) years

KEY: CA =Current asset, FA= Fixed asset, TA= Total Asset, TLIAB= Total Liability, OEQ= Owners Equity