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Evaluation of the Financial Growth and Performance of Tepi Coffee Producer Farmers' Cooperatives Union, Sheka Zone, South West Ethiopia

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Abstract
Financial performance analysis of a firm can be made from its audited financial reports, balance sheets and income statements, to measure its liquidity, solvency, asset management efficiency and profitability position in maximizing the wealth of owners. In line with this, the main purpose of the paper is Evaluation of the Financial Growth and Performances of Tepi Forest Coffee Producer Farmers' Cooperative Union, Sheka Zone, South West Ethiopia. For attaining this objective, secondary data were drawn from audited financial statements of the union for 2010-2016 G.C. and analyzed through ratios and trend analytical techniques. The result of the study revealed current ratio, quick ratio and networking capital were above the standard denoting that the liquidity position of the union is satisfactory. However, the debt and equity ratio (all periods) and the debt to asset ratio (in some study periods) were greater than the standard and the proprietors' ratio (over all study periods) was below the standards showing that the union's long term solvency was very poor. It was also revealed that the inventory turnover ratio and the total asset turnover ratio of the union indicated that the union was efficiently managing its inventory and its total assets in increasing its return respectively. But, the debtors' turnover ratio of the union was below the standard. Besides, the gross profit margin ratio, operating profit margin ratio and net profit margin ratio of the union revealed that the profitability of the union was not at its satisfactory level. Therefore, to improve the debtors' turnover ratio of the union, there should be effective collection and credit policy and collection effort. In addition, to improve the solvency position of the union, the management of the union should increase its internal own funds by increasing cooperative members and thereby issuing additional shares, and increase reserve funds by engaging in profitable businesses. To upsurge profitability position of the union, the management bodies should decrease manufacturing and purchasing costs and other operating and non-operating expenses, design effective product pricing policies and undertake profitable business ventures.
Keywords: Financial Growth and Performance, Cooperative Union, Ratio Analysis, Trend Analysis

1. INTRODUCTION

1.1 Background of the Study

Cooperation is an age-old tradition that runs through the fabric of Ethiopian society. New era in cooperative development was started in Ethiopia in 1998 when new cooperative legislation No 147/1998 was enacted. Since then, cooperatives have been playing significant role in the rural Ethiopia, especially in the areas of input supply, saving and credit, coffee and grain marketing (FCC, 2004 cited in Demeke, 2007). The establishment of cooperative unions in coffee and grain growing areas is a new experience for the country in general and for the organization of cooperative federation in particular.

As background to their establishment, after 1998, the decline of international coffee prices caused a great deal of business trouble between traders and cooperatives. The Ethiopian government took the initiative to establish Coffee Farmers Cooperative Unions to manage coffee export business on behalf of primary coffee cooperatives that lacked human resources and logistical capacity. At the first stage of establishing coffee unions, the Ethiopian government recruited ex-government officials who were experienced in cooperative activities and the coffee business and supported their salaries in the first two years after their establishment. Coffee unions are privileged to skip coffee auctions in which private traders are obliged to participate (Kodama, 2007).

A well designed and implemented financial management is expected to contribute positively to the creation of a firm's value (Padachi, 2006). Dilemma in financial management is to achieve desired tradeoff between liquidity, solvency and profitability (Lazaridis et al., 2007). Ultimate goal of profitability can be achieved by efficient use of resources. It is concerned with maximization of shareholders or owners' wealth. It can be attained through financial performance analysis (Panwala, 2009). Ratio analysis provides relative measures of the company's financial performance and can indicate clues to the underlying financial position. (Amalendu Bhunia, et al., 2011).

1.2 Statement of the Problem

Finance is a blood not only for corporate businesses but also for cooperative societies. Unless the financial position and financial performance of cooperatives are healthy, it may be a nightmare for cooperative societies to sufficiently serve their members and contribute to the national economic development. Therefore, finance is the

fundamental requirement for cooperatives, to carry on operations and achieve the goals. It has been rightly stated that business needs money to make more money (Demeke, 2007).

Several studies have been conducted in Ethiopia on financial performance of cooperatives and their result indicated that majority of failures of cooperatives was the result of the lack of proper financial management. For instance, Tekeste et. al. (2014) conducted a research on financial performance of Multi-Purpose Cooperative Unions and the findings revealed that their borrowing power, profitability and their asset utilization efficiency is not satisfactory. In addition, the poor financial performance of the cooperatives is the result of inefficient financial management skill, lack of adequate internal capital and their significant part of the total capital employed was in the form of borrowed capital, and presence of tight competition from outside the cooperative sector (Tsegay, 2008).

In Ethiopia, several coffee farmers' multipurpose cooperative unions have been established to support peasants who are handicapped by their lack of negotiating power in the global economy. But, the actual volume of purchase by these unions is limited due to financial constraints. Because of this, the majority of cooperatives continue to rely on conventional marketing channels rather than on unions. (Kodama, 2007). In the Ethiopia, however, existing literatures did not show accurately what the financial performance of coffee cooperatives in the Ethiopia looks. And also, still now, to the very knowledge of the researcher, no studies have been made on the financial performance analysis in the study area. This study, therefore, aimed at evaluating the financial performance and financial growth of forest farmers' coffee cooperative union and identifying their problems in the study area.

1.3 Objectives of the Study

The current study tried to achieve the following objectives:

1. To examine the liquidity position of the union over the study periods.
2. To analyze the solvency position of the union over the study periods.
3. To measure the overall profitability of the union.
4. To analyze the growth trend of the overall financial position and performance of the union over study periods.

2. Review of Literature

Omid Sharifi (2013) stated that financial statements provide certain basic information that focuses on the entity as a whole and meets the common needs of external users. To assess the performance of the cooperatives, different financial ratios can be used. Financial ratios can be designed to manage cooperative's performance. Ratios can be used as one tool in identifying areas of strengths or weakness in cooperatives. Financial ratios enable to make comparison of cooperative's financial conditions over time or in relation to other cooperatives. For example, Alema (2008), used financial ratio analysis to assess the performance of the sample cooperatives that was calculated from the audited financial reports (balance sheet and income statement of each cooperative society). Among ratio analysis methods, liquidity ratio (with current ratio), financial leverage (finances a portion of assets with debts) and profitability ratios (net profit/total asset) of sample multipurpose cooperatives in Alamata Woreda were used. The liquidity analysis showed that the cooperatives under investigation were below the satisfactory rate for the two years. All of the cooperatives under investigation in the two woredas used financial leverage their profitability ratio showed their profitability was weak.

Tamilarasu and Tatiku (2015) stated that analysis of financial statements of Cooperative is necessary for member and non-members, because it helps and depicts the financial position and performance on the basis of past and present records of financial statements. They conducted a Study on Financial Performance of Robi-berga Farmers' Cooperative Union in West Shoa Zone, Oromia Regional State, Ethiopia using five years (2009-2013 G.C) audited financial reports of the union using Ratio Analysis, Funds flow and Cash Flows Analysis. From the ratio analysis methods, they used liquidity, activity, leverage and profitability ratios. For measuring the liquidity position of the union, the researchers used Current ratios (with acceptable standard of 2:1), Quick ratios (with acceptable standard of 1:1), Absolute liquid ratios (with acceptable standard of 0.5:1) and Net working capital ratios (with acceptable standard of CA>CL). They also tried to depict the leverage position of the union using Debt to equity ratios (with acceptable standard of 2:1), Proprietor's ratios (with acceptable standard of 0.5:1), Debt to assets ratios (with acceptable standard of 78%), and Fixed assets to net worth ratios (with acceptable standard of 1:1). Furthermore, these researchers analyze the activity performance of the union using Inventory turnover ratios (with acceptable standard of 8 times), Debtor turnover ratios (with acceptable standard of 5 times) and Total assets to turnover ratios (with acceptable standard of 2 times). Finally, to measure the profitability of the union, different ratios are used like Gross profit ratios (with acceptable standard of 25-30%), Net profit ratios (with acceptable standard of >5%), Return on shareholders' investment (with acceptable standard of Higher), and Return on total assets Ratios (with acceptable standard of 2-3%). The results of the study indicated that the overall financial performance of the union was not in the satisfactory position.

Furthermore, Tekest.et al (2014) have conducted their study on the financial performance of Eight Multi-

Purpose cooperative unions in Tigray Region. The study considered three years' (2000 to 2003(E.C)) audited financial reports with regard to quantitative data analysis using financial analysis ratios such as liquidity ratios using current ratios (with acceptable standard of 2:1) and net working capital (with acceptable standard of current asset>current liabilities), leverage ratios using total debt to asset ratio (with acceptable industry standard of <0.5:1) and Total asset to debt ratio (with acceptable standard >1:1), and profitability ratio using gross profit margin (with acceptable industry standard of 25%-30%), operating profit margin (with acceptable industry standard of 75%-85%), net profit margin (with acceptable industry standard of higher in amount) and return on net asset ratio (with acceptable industry standard of higher in amount). The result of the above study revealed that the current ratio is below the industry standard; the leverage position of the unions indicated that the debt-to-asset ratios of the unions are above the average in all the respected years; the gross profit margins of the unions are efficient in which management produces in each unit of products and services; the operating margin ratio in most of the unions was very poor which is far from the standard, and the borrowing power of the unions are lower than the average.

Natarajan et. al (2015) conducted a research on evaluation of the effectiveness of financial performance of Lume Adama farmers' Cooperative Unions in Oromia Regional State at East Shoa Zone, Lume district. For this purpose, the researchers used different ratios. In order to measure the quality of the cooperatives union' receivables and how efficiently it uses and controls its assets, and how effectively the firm is paying suppliers on its equity (using borrowed funds), they used Efficiency ratios include inventory turnover ratio (ITOR) (with acceptable standard of 8 times), debtors' turnover ratio (DTOR) (with acceptable standard of 5 times), average debtors' collection period ratio (ADCPR) (with acceptable standard of 45 days), creditor's turnover ratio (CTOR) (with acceptable standard of 5 times) and average payment period ratios (APPR) (with acceptable standard of 30 days). They depicted that the inventories turnover was not a sign of efficiency. In order to measure the profitability of the unions, profitability ratios were used that includes gross profit margin (with acceptable standard of 25%), operating profit margin (with acceptable standard of 75-78%), net profit margin (with acceptable standard of >5%), return on net asset (with acceptable standard of 2-3%) and return on equity (with acceptable standard of 15-20%). The result showed that in all the years, the gross profit ratio of the union was under the standard; the union has poor financial liquidity position, leverage position, profitability position, and has not operating the activities in financial efficiency and effective way.

Muhabie (2015) examined the financial performances of five coffee marketing cooperatives in Yirgacheffe Woreda, Gedeo Zone, SNNPRS, Ethiopia using current ratios, debt to equity ratios, accounts payable to sales and profitability ratios based on the cooperatives' audited financial statements which help to evaluate the efficiency of operations, the managerial performance and credit policies, potential investments and the credit worthiness of borrowers. In his study, the liquidity position of cooperative societies is measured using current ratio (acceptable standard of 2:1). Furthermore, the financial leverage management position was measured using debt to equity ratio (DER). Finally, for measuring the profitability of the cooperatives, the simplest and widely used profitability ratio called Net Profit Margin Ratio was utilized. The overall result of this study indicated despite the fact that cooperative societies have shown improvements from time to time, they are not still financially strong enough.

3. Methodology of the Study

3.1. Description of the Study Area

Sheka is a Zone in the Ethiopian Southern Nations, Nationalities and Peoples' Region (SNNPR). Sheka is bordered on the south by Bench Maji, on the west by the Gambela Region, on the north by the Oromia Region, and on the east by Keffa. The administrative center of Sheka is Masha. Sheka is the western part of former Kefficho Shekicho Zone. Based on the 2007 Census conducted by the CSA, this Zone has a total population of 199,314, of whom 101,059 are men and 98,255 women; 34,227 or 17.17% are urban inhabitants. Tepi Coffee Producer Farmers' Cooperative Unions is located in Tepi, Southern Nation Nationalities and Peoples' Regional State, South Western Ethiopia. It was established in 2004 by 17 Primary Cooperatives with 4000 individual members and initial capital of Birr 200,000. Currently, the Unions has 38 member primary cooperatives with an individual membership of 11,370 small holder farmers. (Tepi Coffee Farmers' Cooperative Unions,2015)

3.2 Research Design

The researcher employed descriptive type of research design quantitative data analysis research approach.

3.3 Sources of Data

The source of data was secondary that was has been obtained particularly from the six years (2010- 2016(G.C)) audited financial reports of office of Tepi Coffee Producer Farmers' Cooperative Union.

3.4 Methods of Data Collections

The methodology that was used in data collection for the study was a review of secondary data. Documents of unions particularly audited financial statements of six periods, as well different researches related to the topic were reviewed

to obtain information related to the study.

3.5 Sample Size and Sampling Techniques

The researcher selected the Six Years (2010- 2016 (G.C)) audited financial reports of Tepi Farmers' Coffee Cooperatives Union purposively because of presence of well-organized audited financial statement data in these periods.

3.6 Methods of Data Analysis and Interpretation

The researcher adapted descriptive data analysis methods after the data collection process has been accomplished. Quantitative data analysis methods were customized. The data was analyzed and interpreted using ratio and trend analysis to find out the true picture of the financial performance of the cooperatives union. This study tried to analyze the union's six years audited financial statements data using profitability, liquidity, leverage and profitability ratios, tables, percentages and graphs to measure financial performance of the union.

4. Result and Discussion

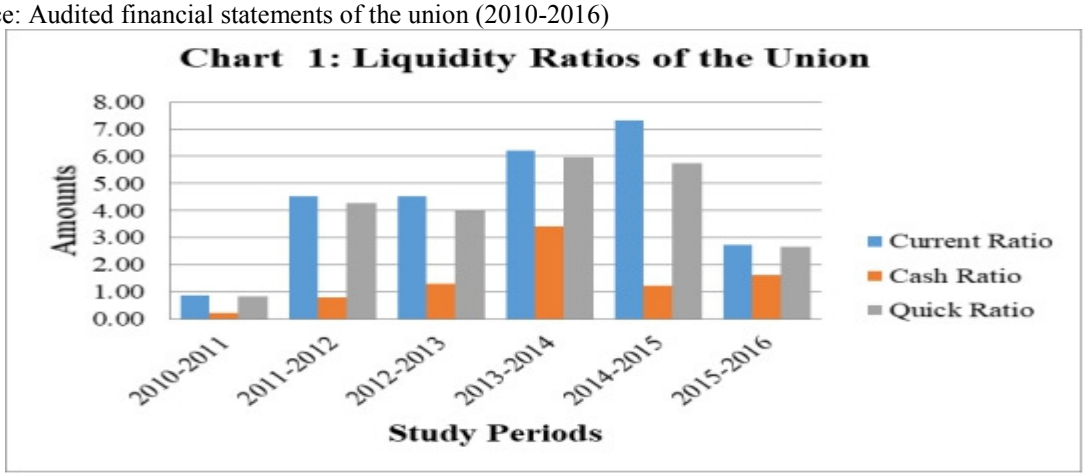
4.1. Measuring the Liquidity Position of the Union

Liquidity ratios provide a measure of the union's ability to generate cash to meet their immediate needs (current liabilities). So, to measure the liquidity position of the union's, current ratios, cash ratios, quick ratios and networking capital were depicted as follows.

Table 4.1. Liquidity Positions of the Union

Years	Liquidity Ratios of the Union			
	CR	CAR	QR	NC
2010-2011	0.91	0.24	0.85	(233,207.09)
2011-2012	5.78	1.02	5.43	1,535,576.07
2012-2013	5.50	1.59	4.82	1,838,289.24
2013-2014	6.22	3.41	5.95	2,085,358.12
2014-2015	7.31	1.22	5.74	1,886,881.51
2015-2016	2.74	1.62	2.66	2,902,035.62
Average	4.75	1.52	4.24	1669155.58
Standard	2:1	1:1	1:1	CA>CL

Source: Audited financial statements of the union (2010-2016)



Source: Depicted from Table 4.1

1. **Current Ratio (CR):** it indicates the union's ability to satisfy its current liabilities with its current assets whenever they matured. The higher the current ratio the union has the more liquidity position the union is endowed and vice versa.

$$\text{Current Ratio} = \frac{\text{Current Asst}}{\text{Current Liabilitie}}$$

Table 4.1 and Chart 1 indicated that the current ratio of the union was 0.91, 5.78, 5.50, 6.22, 7.31, and 2.74 in the periods of 2010-2011,2011-2012,2012-2013,2013-2014,2014-2015 and 2015-2016 respectively. Except 2010-2011, in all periods, even their averages, the union has current ratio greater than the standard showing that the union can easily satisfy its current liability with its current asset. This indicates that the union was highly liquid.

2. **Cash Ratio (CAR):** It indicates that the ability of the union to satisfy its current liabilities with its most liquid assets called cash and cash equivalents. The higher the cash ratio the union has the more liquidity position the union is endowed and vice versa.

$$\text{Cash Ratio} = \frac{Cash + Marketable\ Securities}{Current\ Liabilitie}$$

As it is revealed on the same table and chart above, the cash ratio of the union shows increasing trend in 2010-2011,2011-2012,2012-2013,2013-2014 by 0.24, 1.02,1.59 and 3.41 respectively and decreased to 1.22 in 2014-2015 and raised to 1.62 in 2015-2016. This indicates that the cash ratios over all the periods, except in 2010-2011 and 2011-2012, including their averages, was above the standard. This means, in most periods, the union did not face liquidity problem satisfying current obligations through cash and short term marketable securities whenever they mature.

3. **Quick Ratio (QR):** It is also called Acid Test ratio that measures that the ability of the union to satisfy its current obligations with its quickest assets such as cash, marketable securities, account receivables and other short term receivables. The higher the quick ratio the union has the more liquidity position the union is endowed vice versa.

$$\text{Quick Ratio} = \frac{Current\ Assets - Inventories}{Current\ Liabilities}$$

Table 4.1 and chart 1 depicted that the acid test ratios of the union were 0.85, 5.43, 4.82, 5.95, 5.74, and 2.66 in the periods of 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016 respectively. Except in 2010-2011, in all periods even their averages, the union has acid test ratio of above the standard showing that the union can easily satisfy its current liability with its quickest assets such as cash, marketable securities, account receivables and other short term receivables.

4. **Networking Capital:** It indicates the remained current asset of the union after it meets its current obligations. The higher value the networking capital the union has the more liquidity position the union is endowed vice versa.

$$\text{Networking Capital} = (Current\ Assets - Current\ Liabilities)$$

Table 4.1 also indicates that the networking capital of the union was (233,207.09), 1,535,576.07, 1,838,289.24, 2,085,358.12, 1,886,881.51, and 2,902,035.62 in the periods of 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016 respectively. Except 2010-2011, in all periods even their averages, indicates as the union has networking capital of above the standard showing that the union can easily satisfy its current liability with its current asset. Therefore, the union was highly liquid.

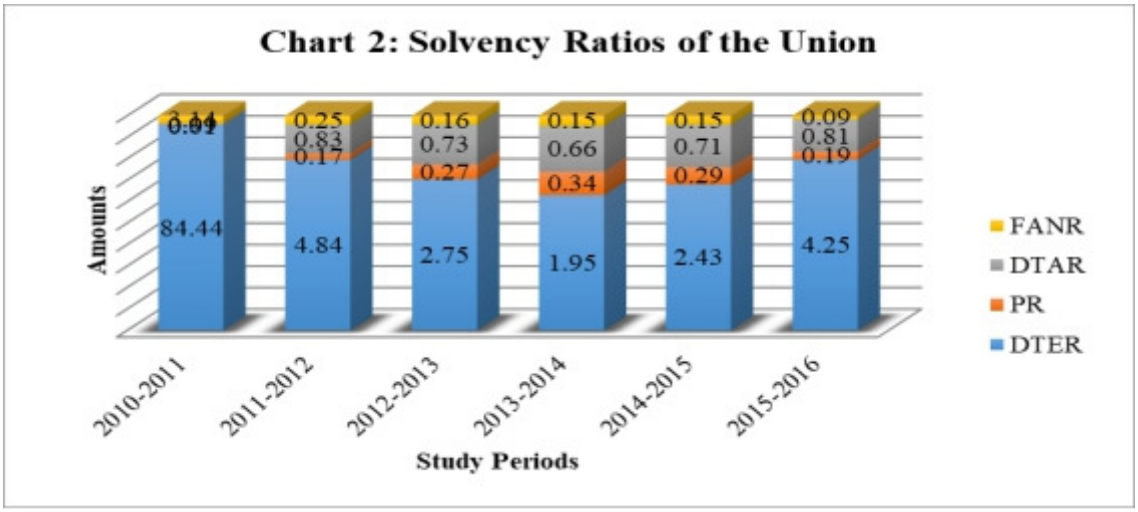
4.2. Measuring the Solvency (Leverage) Positions of the Union

It was measured using solvency (leverage) ratios to evaluate how much reliant the union is on debt financing and equity financing and to show the ability of the union to meet its long term financial obligations. To analyse these concerns, debt to equity ratios, proprietors' ratios, debt to asset ratios and fixed asset to net worth ratios were employed and depicted as follow.

Table 4.2: The Solvency(leverage) ratios of the union

Years	Solvency Ratios of the Union			
	DTER	**PR**	**DTAR**	**FANR**
2010-2011	84.44	0.01	0.99	3.14
2011-2012	4.84	0.17	0.83	0.25
2012-2013	2.75	0.27	0.73	0.16
2013-2014	1.95	0.34	0.66	0.15
2014-2015	2.43	0.29	0.71	0.15
2015-2016	4.25	0.19	0.81	0.09
Average	16.78	0.21	0.79	0.66
Standard	2:1	0.5:1	0.78	1:1

Source: Audited financial statements of the union (2010-2016)



Source: Depicted from Table 4.2

1. Debt to Equity Ratios (DTER)

It indicates the relative use of debt and equity as a source of capital to finance the assets of the union. The union with a higher debt to equity ratio are considered riskier to creditors and investors than with a lower ratio and vice versa.

$$\text{Total Debt to Equity Ratio} = \frac{Total\ Liabilities}{Total\ Shareholders'\ Equity}$$

As shown in table 4.2 and chart 2 above, the total debt to shareholders' equity of the union was 84.44, 4.84, 2.75, 1.95, 2.43 and 4.25 in the periods of 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016 respectively. Except 2013-2014, in all periods, including their averages, the union has total debt to shareholders' equity ratio of above the standard showing that the union is leveraged and making the union risky in repaying its long term debt and created solvency problem in satisfying long term liabilities. Payment of principal and interest payment take a significant amount of union's cash flow and ignores payment of dividend for shareholders. This will in turn damage the will of investors to invest in it.

2. Proprietors' Ratio

It is used to evaluate the soundness of the capital structure of a union. A high proprietary ratio indicates a strong financial position of the union and greater security for creditors and vice versa.

$$\text{Proprietors' Ratio} = \frac{Total\ Shareholders'\ Equity}{Total\ Assets}$$

Table 4.2 and chart 2 indicated that the proprietors' ratio of the union was 0.01, 0.17, 0.27, 0.34, 0.29 and 0.19 in the periods of 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016 respectively. This indicates that the proprietors' ratio over all periods is fluctuating and below the standard and that indicates the assets of the union was highly financed by debt and less financed by equity. This implies that the union was heavily depending on debts for its operations which makes the union risky in its solvency position.

3. Debt to Asset Ratios (DTAR)

It indicates the proportion of assets of the union that are financed with debt (both short and long term debt) rather than equity. A high number means the union is using a larger amount of financial leverage, which increases its financial risk in the form of fixed interest payment and vice versa.

$$\text{Debt to Asset Ratio} = \frac{Total\ Debt}{Total\ Assets}$$

As it is shown in Table 4.1 chart 2, the debt to asset ratio of the union was 0.99, 0.83, 0.73, 0.66, 0.71 and 0.81 in the periods of 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016 respectively. In the periods of 2010-2011, 2011-2012 and 2015-2016 the union has debt to asset ratio of above the standard showing that the union's a considerable proportion of assets were funded with debt indicating that union was extremely leveraged and highly risky to invest in or lend to. And in the rest periods (2012-2013, 2013-2014 and 2014-2015), the bulk of asset of the union funding is coming from equity indicating that it the union is safe in satisfying its obligation.

4. Fixed Asset to Net Worth Ratios (FANR)

It shows the extent to which the union's funds are frozen or can't be used for meeting its debt obligations in the form of fixed assets, such as property, plant and equipment. A low ratio is indication of greater solvency because the lower the ratio becomes; the more funds are available to meet current obligations and vice versa.

$$\text{Total Fixed Assets to Net Worth Ratio} = \frac{\text{Total Fixed Assets}}{\text{Total Net Worth}} \quad \frac{\text{Total Fixed Assets}}{\text{Total Net Worth}}$$

Table 4.2 and chart 2 reflected that the fixed assets to net worth ratio of the union shows a decreasing trend which was 3.14, 0.25, 0.16, 0.15, 0.15 and 0.09 in the periods of 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016 respectively. Except 2010-2011, in all other periods, the union has the fixed assets to net worth ratios of below the standard. This indicates that higher investment was made on current assets than fixed assets and more funds are available to meet union's current obligations.

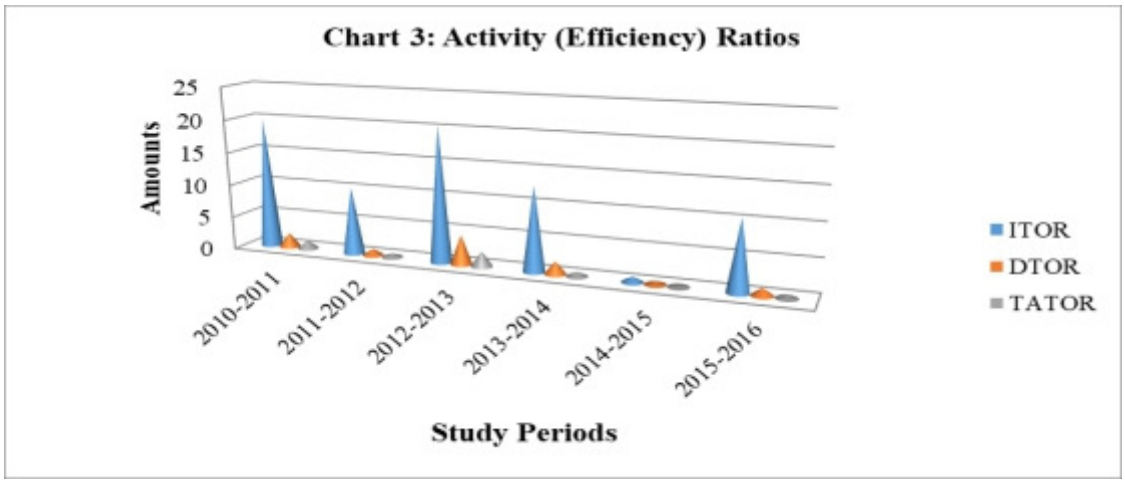
4.3. Measuring the Asset Management Efficiency Position of the Union

Activity ratios are used to measure how efficiently the union utilizes its assets. In other words, they present how many times per period inventory is replenished or receivables are collected. For this purpose, inventory turnover ratio, debtors' turnover and total asset turnover ratios were customized.

Table 4.3 Activity Ratios of the Unions

Year	Efficiency (Activity) Ratios of the Union		
	ITOR	DTOR	TAOT
2010-2011	19.78	2.18	1.26
2011-2012	10.26	0.97	0.61
2012-2013	20.48	4.49	2.27
2013-2014	12.76	1.91	0.67
2014-2015	0.83	0.43	0.23
2015-2016	10.62	1.10	0.39
Average	12.45	1.85	0.91
Standard	8 times	5 times	2 times

Source: Audited financial statements of the union (2010-2016)



Source: Depicted from Table 4.3

1. Inventory Turnover Ratios (ITOR)

It indicates how many times inventory is created and sold during the period. The higher the inventory turnover ratio the union has the greater merchandizing capacity the union is endowed and vice versa.

$$\text{ITOR} = \frac{COGS}{Inventories}$$

Table 4.3 and Chart 3 describe that the inventory turnover ratio of the union was 19.78, 10.26, 20.48, 12.76, 0.83 and 10.62 in the periods of 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016 respectively. This depicted that except 2014-2015, in all periods, the union has the inventory turnover ratio more the standard showing that the union is efficiently managing its inventory and there may lead to less carrying cost and low rental of space needed for inventory.

2. Debtors' Turnover Ratio (DTOR)

It is the ratio of net credit sale to account receivable that indicates that how many times in the period credit sales have been created and collected on. A higher DTOR is an indication of good performance indicating that customers are paying bills on time to the union and vice versa.

$$\text{DTOR} = \frac{\textit{Net Sale}}{\textit{Accounts Receivables}}$$

As it is depicted in Table 4.3 and chart 3, the Debtors' Turnover Ratio of the union was 2.18, 0.97, 4.49,1.91, 0.43 and 1.10 in the periods of 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016 respectively. This indicates that over all the study periods the Debtors' Turnover Ratio was below the standard signifying that the union had not efficient collection and credit policies of account receivables and it is possible to say that the union is not efficient in converting account receivables to cash easily and on time. In other words, this may indicate the union has either liberal credit policy, poor credit selection or inadequate collection effort or policy.

3. Total Asset Turnover Ratios (TATOR)

It measures how efficiently the union uses its total assets to generate revenues or income. The higher the total asset turnover ratio the union has, the more efficiently the union used its invested in asset in producing sales amount and vice versa.

$$\text{TATOR} = \frac{\textit{Net Sale}}{\textit{Total Assets}}$$

Table 4.3 and chart 3 pointed out that the total asset turnover ratio of the union was 1.26, 0.61, 2.27, 0.67, 0.23 and 0.39 in the periods of 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016 respectively. Except 2012-2013, in all periods, the total asset turnover ratio of the union was below the standard showing that the union was efficiently managing the total assets in increasing its return.

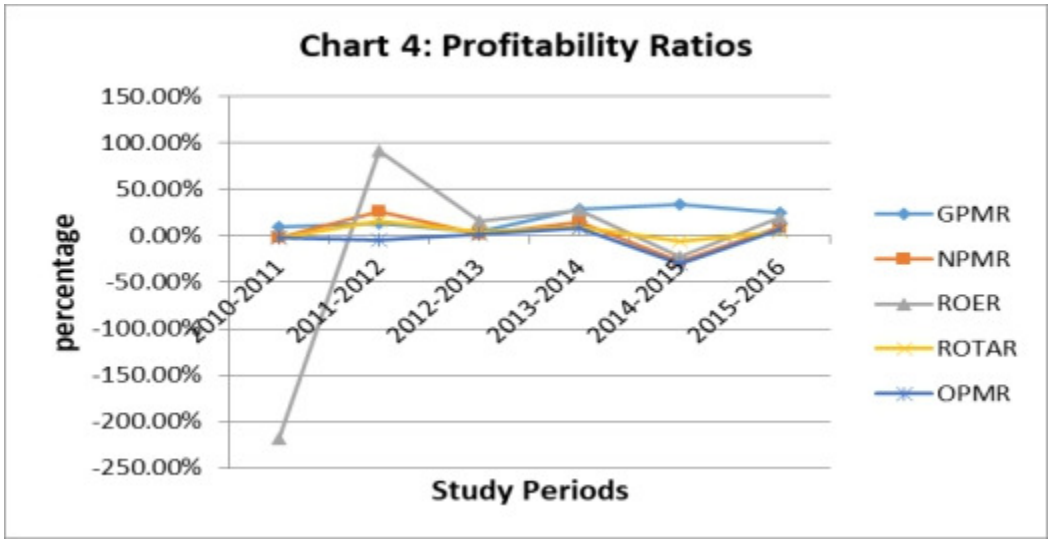
4.4. Measuring the Profitability of the Unions

Profitability of the union is an indication of the efficiency with which the operations of the union are carried out that can be measured by its profitability ratios such as Gross profit margin ratio, net profit margin ratio, return on equity and return on total asset.

Table 4.4 Profitability of the Union

Particulars					
	Profitability Ratios of the Union				
Year	GPMR	NPMR	ROER	ROTAR	OPMR
2010-2011	9.6%	-2.0%	-218.7%	-2.6%	-2.4%
2011-2012	13.3%	25.7%	91.2%	15.6%	-4.1%
2012-2013	4.7%	1.8%	15.5%	4.1%	1.7%
2013-2014	28.1%	13.9%	27.7%	9.4%	8.2%
2014-2015	33.2%	-28.1%	-22.0%	-6.4%	-29.9%
2015-2016	24.3%	9.5%	19.4%	3.7%	6.8%
Average	18.9%	3.5%	-14.5%	4.0%	-3.3%
Standard	25-30%	>5%	Higher	2-3%	75-85%

Source: Audited financial statements of the union (2010-2016)



Source: Depicted from Table 4.4

1. Gross profit margin ratios (GPMR)

It shows how much of every dollar of sale is left after cost of goods sold. It speaks, how much it costs the union to produce and to sale the product. The higher the gross profit margin ratios is an indication of efficiency of the union and vice versa.

$$GPMR = \frac{Gross\ Profit * 100}{Net\ Sale}$$

Table 4.4 and Chart 4 revealed that the gross profit margin ratio of the union was 9.6%, 13.3%, 4.7%, 28.1%, 33.2% and 24.3% in the periods of 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016 respectively. Except in 2013-2014 and 2014-2015, in all periods, the gross profit margin ratio was below the standard showing that the union was not efficient in controlling the cost of purchase and sell of the product in relation to the sales made over the periods.

2. Operating Profit Margin ratio (OPMR)

It is a measure of overall operating efficiency, incorporating all of the expenses of ordinary, daily business activity. A high OPMR is an indication of good performance and vice versa.

$$OPMR = \frac{Operating\ Profit * 100}{Net\ Sale}$$

Table 4.4 and graph 4 indicated that the net profit margin ratio of the union was -2.4%, -4.1%, 1.7%, 8.2%, -29.9% and 6.8% in the periods of 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016 respectively. This depicts that in all periods the operating profit margin ratio of the union was fluctuating and below the standard showing that the union couldn't easily satisfy operating expenses whenever they are incurred.

3. Net Profit Margin Ratio (NPMR)

It designated how much of each dollar of sales is left over after all expenses are satisfied. It measures management's efficiency in manufacturing, administering and selling of union's products. It is the overall measure of the union's ability to turn each sale into Net profit

$$NPMR = \frac{Net\ Profit * 100}{Net\ Sale}$$

As it is observed from Table 4.4 and chart 4, the net profit margin ratio of the union was -2.0%, 25.7%, 1.8%, 13.9%, -28.1% and 9.5% in the periods of 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016 respectively. Except 2010-2011 and 2011-2012, in all periods, the net profit margin ratio of the union was fluctuating and it was above the standard showing that the union can easily satisfy different expenses whenever they are incurred.

4. Return On Equity Ratio (ROER)

It shows how much union makes profit for each dollar that investors put into it. In other words, it measures the ability of a union to generate profits from its shareholders' investments in the company. Higher values are generally favorable and vice versa.

$$ROER = \frac{Net\ Profit * 100}{Shareholders' Equity}$$

Table 4.4 and graph 4 indicated that the return on equity ratio of the union shoed fluctuation trend. It was -218.7%, 91.2%, 15.5%, 27.7%, -22.0% and 19.4% in the periods of 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016 respectively. This implies that except 2010-2011 and in 2014-2015, in the rest periods, the union has positive return on equity ratio implying that the union was earning positive profit from the employment of shareholders' investment.

5. Return On Total Asset Ratio (ROTAR)

It measures how effectively the company produces income from its assets. Higher values are generally favorable and vice versa.

$$ROTAR = \frac{Net\ Profit * 100}{Total\ Assets}$$

Table 4.4 and graph 4 showed that the return on asset ratio of the union was -2.6%, 15.6%, 4.1%, 9.4%, -6.4% and 3.7% in the periods of 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016 respectively. The result implies that, except 2010-2011 and 2014-2015, in the rest study periods, the return on asset ratio of the union was above the standard showing that the union was efficiently and effectively employing its asset in generating adequate sales or income.

4.5. Trend Analysis of the Financial Growth of the Union

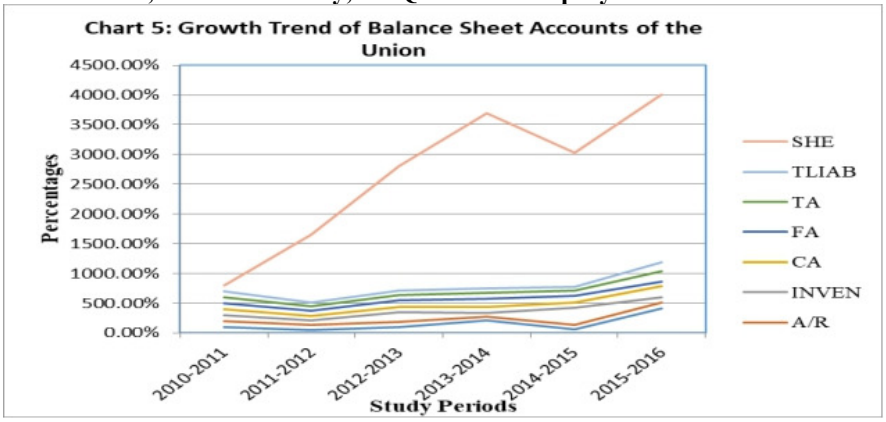
The overall financial growth of the unions was depicted by taking the figures of 2010-2011 as base year. This analysis shows the growth trend of major balance sheet and income statement accounts.

Table 4.5: Trend analysis of balance sheet and income statement elements of the union

Particulars														
Year base year 2010-2011	**Balance Sheet**								**Income Statement**					
Year	CASH & CE	A/R	INVEN	CA	FA	TA	TLIAB	SHE	SALES	COGS	GP	OE	OP	NI
2010-2011	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2011-2012	50%	85%	70%	75%	91%	78%	65%	1141%	38%	36%	52%	55%	64%	-476%
2012-2013	99%	81%	170%	91%	106%	92%	68%	2102%	167%	176%	82%	42%	-117%	-149%
2013-2014	208%	62%	67%	101%	137%	102%	68%	2949%	54%	43%	160%	91%	-186%	-373%
2014-2015	56%	83%	290%	88%	105%	90%	65%	2247%	16%	12%	57%	86%	203%	227%
2015-2016	410%	107%	84%	185%	82%	174%	142%	2827%	54%	45%	138%	79%	-151%	-251%
Average	**154%**	**86%**	**130%**	**107%**	**103%**	**106%**	**85%**	**1894%**	**72%**	**69%**	**98%**	**76%**	**-14%**	**-154%**

Source: Audited financial statement of the union (2010-2016)

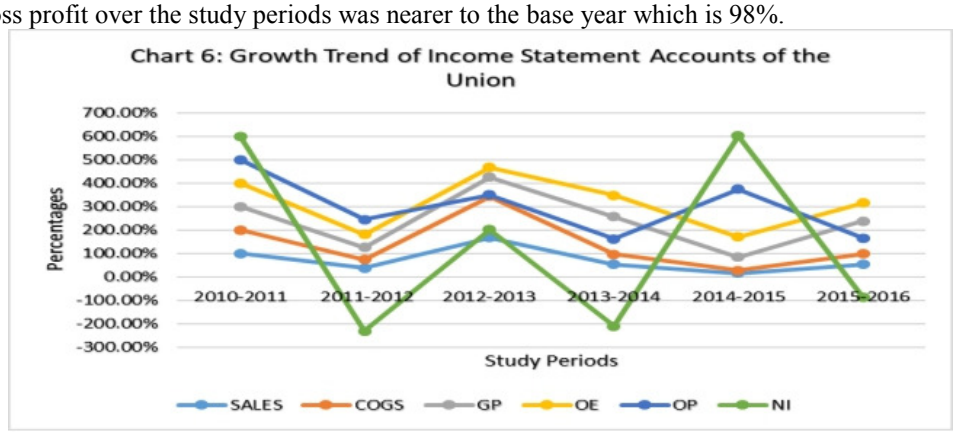
KEY: CASH &CE = cash and cash equivalent, CA =Current asset, AR= Accounts receivable, INV= Inventory, FA= Fixed asset, LIAB= Liability, OEQ= Owners Equity



Source: Depicted from Table 4.5

As the result portrayed on table 4.5 and chart 5, the current assets of the union was decreased from 100% in 2010-2011 to 75% in the year to 2011-2012 and increased to 91% and 101% and again decreased to 88% and increased to 185% in 2012-2013 and 2013-2014 respectively. This points out that current assets of the unions were fluctuating throughout the study years. But, the average growth trend of the current asset of the union is positive which is 107%. The result observed on table 4.5 and chart 5, shows that the fixed assets of the union were decreased from 100% in 2010-2011 to 91% in 2011-2012 and increased to 137% in 2013-2014 and again dropped to 105% and 82% in 2014-2015 and 2015-2016 respectively. This indicates that fixed assets of the unions were unstable throughout the study periods. But, the average growth trend of the fixed asset of the union is positive which is 103% showing that it has good long term growth potential.

Table 4.5 and chart 5 also depicted that the shareholders' equity of the union was increased from 100% in 2010-2011 to 1141%, 2102%, and 2949% in the year to 2011-2012, 2012-2013 and 2013-2014 respectively and decreased to 2247% in 2014-2015 and again increased to 2827% in 2015-2016. This denotes that the shareholders' equity of the union was fluctuating over the study years. Table 4.5 also indicates the fluctuated trend of gross profit of the union over the study periods, that means, it increased in some periods and decrease in other periods. For example, it was decreased from 100% in 2010-2011 to 52% in 2011-2012 and again rise to 160% in 2013-2014 and decreased to 57% in 2014-2015 and again increased to 138% in 2015-2016. This shows that the overall average trend of gross profit over the study periods was nearer to the base year which is 98%.



Source: Depicted from Table 4.5

It is also illustrated in table 4.5 and chart 6, above that the operating profit of the union was decreased from

100% in 2010-2011 to -186% in 2013-2014 and radically improved to 203% in 2014-2015 and again highly deteriorated to -151% in 2015-2016. This indicates the average growth trend was negative 14% which is bad signal. The negative growth trend of operating profit of the union showing that the union could not easily control selling and administrative expenses. The overall average trend of operating profit over the study periods was more far from the base year which is 76%.

As it is indicated in table 4.5 and chart 6, the net profit of the union was decreased from 100% in 2010-2011 to -476% in 2011-2012 and slightly improved to -149% in 2012-2013 and again deteriorated to -373% in 2013-2014 and showed major improvement and becomes 227% in 2014-2015 and again decreased drastically to -251% 2015-2016. In almost all periods including their averages, the union has the negative profit showing that the union cannot easily satisfy operating expenses whenever they are incurred. This is an indication of inefficiencies of the union in generating high sales and controlling operating and non-operating expenses. The overall average trend of net income of the study periods was also more negatively far from the base year which is -154%.

5. Conclusion and Recommendations

5.1. Conclusion

The evaluation of the financial growth and performances of Tepi Forest Coffee Producer Farmers' Cooperative Union, Sheka Zone, South West Ethiopia was undertaken using secondary data from audited financial statements of the union for 2010-2016 G.C. and analyzed through ratio and trend analytical techniques, and findings of this study are depicted as follow.

Liquidity ratios indicated that liquidity position of the union is satisfactory. Except in 2010-2011, in the rest periods, the current ratio, the quick ratio and networking capital of the union were above the standard that imply the union can easily satisfy its current liability with its current asset such as cash, marketable securities, account receivables and other short term receivables and other current assets. The cash ratio the union, except in 2010-2011 and 2011-2012, was above the standard indicating that the union did not face liquidity problem in satisfying current obligations through cash and short term marketable securities.

The study illustrated that the solvency ratios indicates as the union was leveraged in majority study periods that the solvency position of the union was not satisfactory. The debt and equity ratio (except 2013-2014), and the debt to asset ratio of the union (in the periods of 2010-2011, 2011-2012 and 2015-2016) was above the standard. And the proprietors' ratio over all study periods is below the standard. These shows that the union was heavily depending on debts for its operations which makes the union extremely leveraged and highly risky to invest in or lend to. But, in the study periods of 2012-2013, 2013-2014 and 2014-2015), the majority of asset financed from equity indicating that the union is safe in satisfying its obligation. The fixed asset to net worth ratio of the union, except in 2010-2011, was below the standard indicating that higher investment is made on current assets and more funds are available to meet union's current obligations.

The inventory turnover ratio of the union in all periods, except 2014-2015, was above the standard showing that the union is efficiently managing its inventory; the debtors' turnover ratio over the study periods is below the standard indicating that the union may be suffered from cash shortage and it may create high bad debts of receivables, and the total asset turnover ratio of the union, except 2012-2013, was below the standard showing that the union was efficiently managing the total assets in generating its return.

The result also discovered that the gross profit margin ratio, except in 2013-2014 and 2014-2015, and the operating profit margin ratio of the union in all periods were below the standard showing that the union had weak profit position. Furthermore, the net profit margin ratio of the union, except 2010-2011 and 2011-2012, was above the standard indicating that the profitability was improved that helps the union to easily satisfy different expenses like interest expenses whenever they are incurred. The return on equity of union, except 2010-2011 and in 2014-2015, and the return on total asset ratio, except 2010-2011 and 2014-2015, were above standard and positive respectively implying that the union was earning positive profit from the employment of shareholders' investment, and the union was efficiently employing its asset in generating sales or income.

The trend analysis of balance sheet and income statement accounts of the union showed fluctuation growth trend which shows increasing trend on some periods and decreasing trend on other study periods.

5.2. Recommendations

Based on the finding of the study, the following recommendations were forwarded:

The cash ratio the union indicates as it was below the standard that causes the union to face liquidity. Therefore, the concerned bodies should work to have optimum cash and cash equivalents by adopting good collection policy and collection effort and proper planning of cash and credit policy.

In majority study periods, the debt and equity ratio and debt to asset ratio of the union of the union were above the standard and the proprietors' ratio over all study periods was below the standard. These makes the union unable to repay its principal and interest payments for the debt and over the long-term, this would lead the union to bankruptcy. Therefore, the union should increase its internal own funds by increasing cooperative members and

thereby issuing additional shares and increase reserve funds by engaging in profitable business. The management of the union should take into account that no more than half of the union asset should be financed with debt.

The result also revealed that the debtors' turnover ratio over the study periods is below the standard. This creates liquidity problem. Therefore, there should be employing of effective credit and collection policy and collection efforts.

The gross profit margin ratio, operating profit margin ratio and net profit margin ratio of the union revealed that the profitability position of the union was not at its satisfactory level that it was not efficient in controlling the cost of purchase and sell of the product, cost of manufacturing, other operating and non-operating expenses. Therefore, the management bodies of the union should decrease manufacturing and purchasing costs and other operating and non-operating expenses, design effective product pricing policies and undertake profitable business ventures.

The trend analysis of balance sheet and income statement accounts of the union showed fluctuation growth trend which shows increasing trend on some periods and decreasing trend on other study periods. Therefore, the management of the union should also give due attention, especially for those items of financial statement which show deteriorating results.

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