



---

## **Performance of Microfinance Institution Integrating Financial and Non-Financial Metrics: In BGRS, Assosa Zone**

**Daba Geremew (MSc)\***

*Assosa University, Ethiopia College of Business and Economics, Department of Accounting and finance, Field  
of specialization: Masters of Accounting and finance  
Email: oljirageda@gmail.com*

### **Abstract**

The major objective of this study is to assess the financial & non-financial performance of Assosa Zone Microfinance Institutions by integrating financial and non-financial metrics. The research is descriptive in type and both quantitative and qualitative research approach was adopted. Also both probability and non-probability sampling techniques were employed for this study to collect data from primary and secondary data and primary data collected using five scale Likert question and secondary data were collected from the report of Assosa Zone Microfinance Institutions to National bank of Ethiopia (NBE) from 2014 to 2018. A total of 6 microfinance experts, 48 staffs and 376 clients participated in the study. The analysis is done using descriptive statistics and SPSS version 21. Concerning the findings, after the three non-financial perspectives (customer, internal business process and learning and growth) and financial perspective aggregated on the model of overall performance index, the entire performance which advanced by enhancing indicators identified with high, low and average score under each of the four perspectives is approach to average result. However the average of financial performance was high. Thus, this indicates that non-financial performance factor is highly affecting the overall performance of MFIs in BGRS, Assosa zone. There is also evidence that learning and growth in general, research and development, Ratio of Operating Expense to Loan Portfolio, depth of outreach and portfolio at risk are major determinants in this study. So the BGRS, Assosa zone in particular will take appropriate action on each identified problems.

**Keywords:** Micro finance; financial; non-financial and performance.

---

\* Corresponding author.

## **1. The Study Background**

Shortage of financial access is the major problem which threatens economic growth in Ethiopia. Since access to service of financial institutions are very limited the great number of people obtained financial service through informal money lenders, from their relatives and other informal sources. In order to reduce such types of problems the government of Ethiopia has taken several economic reforms such as creating income generating activities and promoting entrepreneurs, encouraging savings and private investments and launching of micro and small scale industries. In the right environments, microfinance can accomplish many roles such as financing people's economic choices, diversifying household income, making household less vulnerable to downturn in the economy or personal, smoothening income flows of the household, improve quality of life throughout the year and strengthen the economic position of women so that they can take greater control of decisions and events in their lives [49]. The need for balance financial and nonfinancial performance in microfinance institutions resulted into formation of social task force tasked to come up with social metrics which can be used together with financial metrics in the evaluation of performance of microfinance institutions [32].

### ***1.1. The Problem Statement***

There are different factors affecting performance of MFIs related to clients and institutions such as repayment problems, diversion of loan into non income generating activities, business condition of the borrowers, shortage of human resource, lack of cost effective technologies, shortage of loan capital and some others [49]. Empirical studies in the country have mostly focused on Performance of microfinance institutions is analysed from two perspectives; first, an evaluation of historical performance based on analysis of financial statements and second, an assessment of their potential to survive in the long-run [43]. The extent to which Microfinance institutions balance between financial and nonfinancial focus has not yet been documented. Hence, the financial and social performance of the microfinance institutions is better to be measured using the balanced score card. Therefore, this study found evidences on performance of Microfinance institutions in Assosa Zone by integrating both financial and nonfinancial performance metrics.

### ***1.2. Significance of the Study***

The study believed to be important in improving the operation of Microfinance Institutions in Assosa Zone by clearly representing the financial & social performances of the institutions. The research is generally expected to: Provide important information to decision makers such as donors, customers, the government and the public at large how well the institution is performing.

## **2. Reviews of literature**

Microfinance as all types of financial intermediation services (savings, credit, funds transfer, insurance, pension remittances and others) offered to low-income households and enterprises in both urban and rural areas, including employees in the public and private sectors and those who are self-employed [37]. Churchill & Frankiewicz, articulate microfinance as commonly associated with small, working capital loans that are invested in microenterprises or income-generating activities [11]. Performance measurement in MFIs has recently

undergone some significant changes from both internal and external point of views. The external factors such as, changes in the business environment, changes in technology, involvement of commercial banks in MFIs and increased competition resulted into a shift in MFIs performance measurement trend with most of stakeholder requiring not only improvement in financial performance measures but also a balance between financial and non-financial measures [17]. Based on the advice of Consultative Group to Assist the Poor (CGAP) at the time of analyzing performances analytical tools or indicators for financial and portfolio analysis can be divided into four key areas. Each measure is one important aspect of the financial organization. When combined, the key areas give a well-rounded global perspective of the financial situation. The key categories are four and they are: - first profitability and sustainability which shows the financial returns to the use of the capital and assets employed. Second asset/ liability management which shows the ability of the MFIs to manage its financial obligations when they become due, while maximizing the utilization of assets for profitable purposes. Next portfolio quality which shows the health of the loans outstanding in terms of its risk and the last is efficiency and productivity which shows the costs of an MFI in relation to the outputs. The development of BSC can be traced through the gradual evolution of the BSC as a strategic management system into comprehensive strategy maps [24] and vehicles of corporate-wide strategic alignment [23]. The BSC approach sees the performances of any organization or association from four perspectives and the following is a description of the BSC perspectives [16].

**Financial Perspective:** Financial measures convey the economic consequences for the actions already taken by the organization, and focus on the profitability related measures on which the shareholders verify the profitability of their investment.

**Customer Perspective:** This is a strategy for creating value and differentiation from the perspective of the customer. The managers are obligated to produce measures to respond to the following question:

**Internal Business Process Perspective:** This is a strategy for producing goods and services in the most efficient and effective methods.

**Learning and Growth Perspective;** this perspective is related to the employees of the organization, and it measures the extent to which the organization exerts efforts to provide its employees with opportunities to grow and learn in their domain.

Empirical evidences on performance of microfinance institutions have reported different results, most of them indicating variation of performance across types of MFIs. The study by Tucker and Miles used financial metrics to compare performance of microfinance institutions with commercial banks operating in four countries Africa, Asia, Eastern Europe and Latin America. The findings of the study show that, MFIs that were OSS had higher performance in terms of return on asset (ROA) and return on Equity (ROE) [41]. The majority of MFIs reviewed were found to be weak in financial sustainability. In [12] assessed the performance of microfinance institutions in the country using performance indicators. The findings of the study show that, microfinance performance in outreach was very low compared with the potential demand of financial services. The evidences from India show that most of performing MFIs in India follow different business models but they have similarities in most of the performance indicators [1]. The study by [26] on efficiency of Microfinance institutions in Tanzania reports high production efficiency and low intermediation efficiency among the institutions. All these studies used financial metrics in the measurement of performance of Microfinance institutions. The study by [5] used both financial and nonfinancial performance metrics in the measurement of performance of village credit institutions and the determinant factors in Bali province Indonesia. The findings reported that institutional environment both formal and informal affect the performance of microfinance institutions. While a large body of research on financial institutions financial performance has been undertaken

in the conventional banking industry in Ethiopia. For instance rigorous empirical evidence on microfinance remains limited, largely due to lack of reliable data. The studies conducted in the areas of microfinance institutions in Ethiopia are few in number and did not give such an emphasis on financial and social performance of microfinance institutions in Ethiopia. For example, Alemayehu, studied the financial performance of micro finance institutions by using simple descriptive analysis and employing graphs and percentage growth rates by classifying small, medium and large. The study did not say anything about social performance of MFIs. The study by Yonas and Melkamu tried to see the determinants of performance by using proxy of financial sustainability of Ethiopian MFIs. Therefore, the above studies use limited variables which focus financial performance only and not say anything about social performance using balanced score card in their study. Since it is believed that MFIs must be profitable for their healthy operation and attainment of the long term goal which is alleviation of poverty, this study will find out the MFIs performance by integrating both financial and non-financial metrics including primary data and fills the gap in the context of Ethiopian MFIs. So far no study was found which integrates both financial and non-financial metrics into a balanced scorecard in the measurement of performance of Microfinance institutions.

### **3. Research Methodology**

The study with the aims assessing the financial & nonfinancial performance of Assosa Zone Microfinance Institutions by integrating financial and non-financial metrics was used descriptive research design. The target population was Assosa zone selected woredas employee and customers in Assosa Zone and financial experts of Association of Ethiopia microfinance institution (AEMFIs). A stratified random sampling procedure employed to randomly select the sample groups from each wereda(strata) with 376 sample size of customers. In addition, the totals of employees of each microfinance institutions (48) and 6 financial experts of AEMFIs were purposively selected for the study. The data was collected by distributing structured questionnaires to clients and employees which was self-administered. In addition, secondary data sources of the study were the annual report of Microfinance to NBE (National Bank of Ethiopia) and AEMFI for consecutive five years starting from 2014-2018. Also NBE, microfinance supervision department and AEMFI was asked to give weights for the two perspectives (financial and non-financial) and for each performance indicators under the four BSC perspectives. The survey instruments questioners, in this study were adopted from Eyerusalem (2014) and readjusted by the researcher based on basic BSC theories and review of related literatures. The questioners contains scaling and have only close ended questions and developed using five scale Likert model. 5 = Very high performance 4= High performance 3 = Average performance 2 = Low performance 1 = Very low performance. Since the standard questioner was adopted which is examined using Crombach Alpha, the reliability was not tested. The Primary data was measured by checking for completeness and by entering into SPSS (Statistical Package for the Social Sciences) version 21 software. The secondary data's mainly analyzed the financial perspective indicators and some aspects of non-financial indicators. The mean value of each indicators of performance that drawn from annual report was converted into five point Likert scale based on the benchmark sated by NBE and by the experts in order to make the measurement of financial and non-financial perspective similar

**Table 1:** Performance metrics and average weights

Performance category	Performance Indicator	Sub weight
<b>Financial performance (51 %)</b>	Return on Asset (ROA)	22%
	Return on Equity (ROE)	17%
	Operating Self Sufficiency (OSS)	25%
	Portfolio at risk > 30 days (PaR)	17%
	Ratio of Operating Expense to Loan Portfolio (ROEL)	19%
	100%	
<b>Non-financial performance (49%)</b>		
Customer Perspective (25%)	Percentage Change of Number of Clients (PCNC)	27%
	Percentages of Women Borrowers(PWB)	20%
	Percentage Change of Voluntary Saving (PCVS)	21%
	Customer Satisfaction(CS)	19%
	Clear Social Objective (CSO)	13%
	100%	
Internal Business process (14%)	Borrowers Per loan officers (BPLO)	18%
	Clear Institutional Strategy (CIS)	24%
	Duration of Loan Application Processing (DLAP)	21%
	Research and development (R&D)	17%
	Report to AEMFI, NBE and Mix. Market Inc. (RE)	20%
	100%	
Learning and Growth (10 %)	Employee Satisfaction (ES)	27%
	Employee Training (ET)	15%
	Performance Feedback(PF)	16%
	Investment in Information System (IIS)	25%
	Innovation(I)	17%
	100%	

Source: Own computationbased on questionnaire survey, 2018

### **3.1. Applied Descriptive Models**

To analyze the performance of MFIs in Ethiopia using the BSC approach, a descriptive model in which 20 performance indicators categorized under the 4 perspective of BSC as shown in above were used and finally both the financial and nonfinancial performance merged together to wrap up the overall performances.

### **3.2. Descriptive Model Of Financial Perspective**

The measurement of financial performance involve five(5) financial indicators which are, return on asset (**ROA**) as a proxy for profitability, return on equity (ROE) operating self-sufficiency (**OSS**) as a proxy for sustainability, Portfolio at risk > 30 days (PaR) and Ratio of Operating Expense to Loan Portfolio (ROEL)

$$F (FP) = a1ROA + a2 ROE+ a3OSS +a4PaR +a5 ROEL.....e1$$

Where F(FP) is the overall financial performance, a1, a2 , a3, a4, and a5 are the corresponding weights for return on asset(ROA), return on equity(ROE), operational self-sufficiency (OSS), portfolio at risk > 30day (PaR) and ratio of operating expense to loan(ROEL) respectively. Like the financial perspective the non-financial perspectives also explained using the next descriptive models.

### 3.3. Descriptive Models of Non Financial Perspectives

The descriptive models of non-financial perspective are also constructed using similar procedures discussed in the previous sub section. The three non-financial performance perspectives: customer perspectives (CP), internal business Process (IBP) and learning and growth (LG) perspective express in the following descriptive models.

$$F (CP) = W*PCNC + W*PWB + W*PCVS + W*CS + W*CSO..... e2$$

$$F (IBPP) = W*BPLO + W*CIS +W*DLAP + W*R&D + W*RE..... e3$$

$$F (LGP) =W*ES + W*ET + W*PF + W*IIS + W*L..... e4$$

Where, f (CP) is the standardized nonfinancial performance score for customer perspective, f (IBP) is the standardized nonfinancial performance score for internal business processes and f (LG) is the standardized nonfinancial performance score for learning and growth perspective, “W” are the corresponding weights of each performance indicators in each of the nonfinancial performance perspectives and the overall standardized nonfinancial performance score is modeled in equation 5, that aggregated all the three NFP perspectives.

$$F (NFP) = \beta1f (CP) + \beta2f (IBPP) + \beta3f (LGP) ..... e5$$

Where, F (NFP) is the overall standardized nonfinancial performance score, and  $\beta1$ ,  $\beta2$ ,  $\beta3$ , are the respective weights for customer, internal business process and learning and growth perspectives respectively. The overall performance index (financial plus non-financial) was also captured using the following descriptive model.

$$PI= WFPf(FP) + WNFPf(NFP).....e6$$

Where, PI is the overall standardized performance score value; WFP and WNFP are the corresponding overall weights of financial performance and nonfinancial performance respectively.

## **4. Results and Discussion**

MFIs concentrate on social wealth maximization. This force MFIs to meet two objectives: (1) to generate enough revenue to cover their operating and financing cost and (2) poverty alleviation. These two objectives require input minimization (using the least resources for a given level of outputs) and output maximization (providing the most services for a given inputs). Therefore, efficiency and productivity measurement which examine the extent to which MFIs deliver financial services in the most cost effective manner while maximizing their services with minimal resources is the core point in assessment of institutional performance and sustainability of MFIs.

### ***4.1. Weight Assigned To Performance Perspectives and Indicators***

The experts participated in the survey were asked to indicate, in their view, how much weights should MFIs should give to financial and non-financial performance, for each BSC perspectives and also for each performance indicator. Although there are the fixed ratios converted to scale for financial performance by NBE used as the bench mark, but not for none financial performance. Thus, in order to convert the ratio or numbers in to 5 Likert scale they were asked to set a scale. Based upon their responses the average weights of each perspective were developed for subsequent usage in developing performance indices that enable to comprise financial and non-financial performance using identical unit of measurement.

### ***4.2. Financial Perspective***

The expert participated in the survey provided a higher weight to financial performance (51%) out of totals (100%) weight. Five major financial performance indicators were presented for the experts to divide total weight of 100% to each based on their importance to MFIs in realizing their mission. As shown on table 1, above, on average operating self-sufficiency (OSS) received the highest percentage (25%) followed by return on asset (22%). Portfolio at risk and return on equity received 17% each. Finally Ratio of Operating Expense to Loan received 19%. Though high emphasis given to overall financial performance, the specific weight to each measure provided encouraging view with regard to sustainability rather than profitability, for the fact that more weight to OSS compared to profitability measure (ROA, ROE) may explain more interest on covering operational costs from operating revenue, which ensures independency of donation and subsidy that could make MFIs to have sustainable business models. This can be strengthening by the lowest weight given to ROE compared with even ratio of operating expense to loan indicators of efficiency.

**Non-financial perspective:** The overall weight to NFP is 49%. The weights given to each perspective and their specific indicators are discussed hereunder.

**I. Customer Perspective (CP);** from the total of 49 % weight assigned to NFP, customer perspective (CP) received the highest weight (25%). Experts were also asked to allocate a total of 100% to each of the five indicators of customer perspective in accordance with their view on the importance of the performance indicators in realizing the mission of MFIs in Ethiopia. As shown on table 1, above, on average PCNC received the highest percentage (27%), and followed by PCVS (21%). PWB received the third equal importance. Finally

CS and CSO received the fourth and the fifth importance respectively. The highest weight assigned to PCNC showed high emphasis on breadth of outreach than the depth of outreach which is represented by PWB. Similarly, the second highest weight assigned to PCVS shows the need for mobilizing savings which strengthen MFIs performance by enabling them to operate from own pocket. The lowest focus given to CSO raise questions so far as social objective is the underpinning factor to the emergence of MFIs, it deemed useful to clearly articulate the social objective and raise common understanding among the management, employees and other stakeholders in a way the basic operation can be linked with meeting the social goals without depriving other aspects of performance measures. Beside higher emphasis on financial performance obtained in previous subsections coupled with lowest weight assigned to articulation of clear social objectives (CSO) and (CS) highlights the need for looking the linkage of Ethiopian MFIs institutional strategy to basic micro-financing groundwork.

**II. Internal business process (IBP);** the second non-financial perspective, IBP were given 14% out of a 49 % that experts provided to the three non-financial perspectives. As stated on the BSC assumption IBP has a direct bearing on CP, which includes measures of social objective and overall customer satisfaction, which in turn be reflected in financial performance. With respect to how far the experts allocated the overall score of IBP to each of five indicators under table 1, above, showed that on average DLAP received the highest percentage (24%) followed by CIS 21%. Report to AEMFI, NBE and Mix. Market Inc. received 20% importance. The last two indicators BPLO and R&D received 18% and 17% respectively. In this perspective since, the short duration of loan application processing and clear institutional strategies are the bases for clear report for primary users and to balance borrower per loan officer ratio balance. But, the lowest weight assigned to R&D shows in some way the as still minimum attention given for assessing and identifying the main factors challenging MFIs performance.

**III. Learning and Growth (LG);** Out of the overall 49% of weight assigned to non-financial perspective the expert participated in the survey provided 10% to learning and growth. Five major learning and growth indicators were also rated out of 100% with respect to their effect on LG and the implication on subsequent perspectives of performance. As observed from table 1, above, the highest importance is given to ES (27%) and followed by IIS (25%). Whereas; I, PF and ET are weighted 17%, 16% and 15% respectively. LG is a foundation which has direct implication on IBP which in turn could be reflected on CP that contains majority of social objective linked performance indicators and financial performance but have lowest weight out of the nonfinancial performance perspective. The experts in the survey are in view of high importance to capacitating employees through busting satisfaction which is followed by investment in information system (IIS), which appeared to have possible positive implications towards enhancing efficiency and effectiveness. Feedback to employees and employee training are considered as less important even if they are the source of long-term success and competitiveness based on BSC assumption. In other word BSC assumes feedback and reward is the source of motivation to employees who are the engines of the overall activities of any organization. Even though employee training has the main role to change working environment to attractive and transparent, ET received the lowest of all indicators from the LG indicators which indicates the need for looking the human resource management aspects of BGRS MFI.

**DESCRIPTIVE STATISTICS;** the role of statistics in research is to function as a tool in designing research,



analyzing its data and drawing conclusions there from. Descriptive statistics concern the development of certain indices from the raw data (Kothari 2004). In this study since the developed model is descriptive in its nature the detail of each model and calculation is stated below.

**4.3. Financial Performance (Fp)**

The financial perspective of MFIs performance analyzed using data from 8 Woreda MFIs covering a 5 years period with 310 questioners response data among 376 customer and 47 among 48 employee. After the mean of each year data calculated and considered as the industry result it is changed to five scales Likert using the benchmark which is developed by NBE. Then the mean score of each financial performance indicators used in the descriptive statistical model designed to compute an overall financial performance. The SPSS output for descriptive statics of financial performance indicators are summarized on table 2, below.

**Table 2:** Descriptive statistics for FP

	ROA	ROE	OSS	PAR	ROEL
N Valid	5	5	5	5	5
Missing	0	0	0	0	0
Mean	4.4000	4.4000	4.8000	1.0000	3.0000
Std. Deviation	.89443	1.34164	.44721	.00000	1.87083
Minimum	3.00	2.00	4.00	1.00	1.00
Maximum	5.00	5.00	5.00	1.00	5.00

**Source:** Own computation based on data from annual reports of MFIs to AEMFI (2018)

The overall financial performance computed by aggregating the five indicators as follow:-

$$Descriptive\ model\ F\ (FP) = a1ROA + a2\ ROE + a3OSS + a4PaR + a5\ ROEL$$

$$= 22\% (4.4) + 17\% (4.4) + 25\% (4.8) + 17\% (1) + 19\% (3)$$

$$= 0.968 + 0.748 + 1.2 + 0.17 + 0.57 = 3.656$$

Based on the above analysis the financial performance of sample MFIs in the study using the developed descriptive statistical model is 3.656. This result designated an overall high performance based on the developed 5 Likert scale for the study. The score of ROA, ROE and OSS is 4.4, 4.4 and 4.8 respectively. The three of them are under the category of high performance in this study. From the value it is visible that ability of MFI in BGRS to continue operating in the future is high. If OSS ratio is greater than 100% that MFI is covering all of its costs through own operation and it is not depend on aid or subsidies from donors to survive (Churchill & Frankiewicz, 2006). In this study OSS ratio of all selected MFI at study area greater than 100%. Thus covering cost through own operation. From the average result of each financial perspective indicators, ROA and ROE are the most commonly used indicators to measure MFIs ability to continue operating in the future. On one hand ROA shows how well an institution is managing its asset to adjust its profitability and on the other hand ROE

indicates a MFIs ability to build equity through retained earnings and demonstrate an institutions capacity to generate income from its core financial activity (Wolday&Anteneh, 2011). In addition out of all the financial performance indicators the highest average score is achieved by OSS which is 4.8 then fails under the very high performance category. Concerning ROEL since it score 3 shows the different expenses expended for loan operation is efficient in average. That mean the ability of financial revenue to cover their financial expense is moderate. Inability to control over loan repayment practice is the worst situation for MFI but as it has been shown on table 4.1, the PaR> 30days the average score shows 1 which is under very low performance category. This means MFIs in BGRS are at very low level of controlling risks in relation to their loan.

**4.4. Non Financial Performance (Nfp)**

Since the approach applied in this study is BSC this part of the analysis shows the result of the non-financial perspective that are customer, internal business process and learning and growth perspective. As stated in the methodological part the sources of this part is from both primary and secondary data.

**CUSTOMER PERSPECTIVE;** Under the non-financial performance, customer perspective is the first and in this study the researcher try to see it from PCNB, which can shows the breadth of outreach, PWB as an indication of depth of outreach, PCVS and CS as an indication of efficiency through customer satisfaction, and lastly CSO as an indication of social objectives. The following table 3, summarized results of descriptive statistics computed for each of the indicators under CP.

**Table 3:** Descriptive statistics for CP

		PCNC	PWP	PCVS	CS	COS
N	Valid	5	5	5	310	47
	Missing	0	0	0	0	0
	Mean	4.6000	1.0000	4.4000	3.8726	3.8723
	Std. Deviation	.54772	.00000	.89443	.65170	1.17862
	Minimum	4.00	1.00	3.00	1.80	1.00
	Maximum	5.00	1.00	5.00	5.00	5.00

**Source:** Own computation based on data from annual reports of AEMFI & Questionnaire survey (2018)

$$Descriptive\ model\ F\ (CP) = W*PCNC+W*PWB+W*PCVS+W*CS+W*CSO$$

$$= 27\%(4.6)+20\%(1)+21\%(4.4)+19\%(3.8726)+13\%(3.8723)$$

$$= 1.242 + 0.2 + 0.924 + 0.7357 + 0.5033 = \underline{\underline{3.603}}$$

The result of CP computed by substituting the mean score of each performance indicators under the descriptive statistical model and it shows 3.603. Based on Likert five scales adopted for this study this result failed under

the high performance category. Looking at the average contribution of specific customer perspective performance indicators, PCNC is with a score of 4.6, indicating that the performance of Assosa zone MFIs measured by breadth of outreach is approaching to the very high performance category. Whereas, in contrary the percentage of women borrowers (PWB) is only one (1) showing the very low performance on depth of outreach. But, as Abate and his colleagues (2013) states serving more women tend to be linked with improved financial performance. This directly indicates that Assosa zone MFI totally failed with respect to depth of outreach. However addressing large number of the poor who had been without access to basic financial service, including marginalized and underserved groups such as, women is at the core of the Microfinance vision. PCVS made by clients is also a concern for the fact; it has scored the high performance. With respect to the importance of saving to envisaged outcomes of MFIs Robinson & Graham (2011) argued that increase in voluntary saving not only benefit the client, but also the MFIs and the entire economy. Thus, Assosa MFIs in particular, Ethiopian MFIs in general are supposed to develop the ways to improve both depth of outreach and even more increasing amount of voluntary saving, which both are important for clients, MFIs and the economy as a whole. Finally customer satisfaction (CS) and clear social objectives (CSO) shows a high performance score of 3.8726 and 3.8723 respectively which is almost similar. This indicates that when there is clear social objectives the given organization can easily achieve desired goal. Thus since Assosa MFI is highly performed with clear social objectives, this sector highly satisfy its customer.

**INTERNAL BUSINESS PROCESS (IBP);** Internal business processes which notice the strategy of producing goods and services in the most efficient and effective methods is the other non-financial perspective. Under this perspective BPLO, CIS, DLAP, R&D and RE are included as performance indicators. The descriptive statistics result of this perspective is shown blow in table 4.

**Table 4:** Descriptive statistics for IBP

	BPLO	CIS	DLAP	RD	RE
N valid	5	47	47	47	47
missing	0	0	0	0	0
Mean	4.4000	3.9149	3.8723	2.8582	3.6809
Std. Deviation	.89443	1.45706	1.26176	1.12449	1.18149
Minimum	3.00	1.00	1.00	1.00	1.00
Maximum	5.00	5.00	5.00	4.33	5.00

**Source:** Own computation based on data from annual reports of AEMFIs & questionnaire survey (2018)

$$Descriptive\ model\ F\ (IBP) = W*BPLO + W*CIS + W*DLAP + W*R\&D + W*RE$$

$$= 18\%(4.4) + 24\%(3.91) + 21\%(3.87) + 17\%(2.85) + 20\%(3.68)$$

$$= 0.792 + 0.9384 + 0.8127 + 0.4845 + 0.736 = 3.7636$$

The result with regard to IBP of the sample institutions studied using the descriptive statistical model is 3.7636. This is approach to high performance score category of the five Likert scale adopted in this study. The IBP indicators, namely: CIS, DLAP, RE recorded exciting result. As can be seen from the table 4.6 above CIS, DLAP, RE had an average score of 3.91, 3.87 and 3.68 respectively. This indicates MFIs under the study performed highly in developing better business process through having a clear institutional strategy, and speedy loan application process, which potentially improve customer perspective through its measured indicators. High performance on RE also shows the good communication culture of the studied MFIs. Nevertheless result of research and development is 2.85 it means approach to under the average performance category. This implies that Ethiopian MFIs needs to give emphasis with regard to research and development activities. The average score of BPLO is 4.4 which are under high performance category and the result suggested that, high staff productivity among the studied MFIs in terms of serving borrowers.

**LEARNING AND GROWTH;** under this perspective the included performance indicators include are: - employee satisfaction (ES), employee training (ET), performance feedback (PF), investment on information system (IIS) and innovation (I). The results of the descriptive statics on LG perspective, along with performance indicators are presented below

**Table 5:** Descriptive statics for LG

	ES	ET	PF	IIS	I
N Valid	47	47	47	47	47
Missing	0	0	0	0	0
Mean	3.1348	2.6170	3.1560	2.8865	3.0922
Std. Deviation	1.00880	1.18969	1.05604	.95875	1.07160
Minimum	1.00	1.00	1.00	1.00	1.00
Maximum	4.33	5.00	5.00	4.33	5.00

**Source:** Own computation based on questionnaire survey (2018)

$$Descriptive\ model\ F\ (LG) = W*SE + W*ET + W*PF + W*IIS + W*I$$

$$= 27\%(3.13) + 15\%(2.61) + 16\%(3.15) + 25\%(2.88) + 17\%(3.09)$$

$$= 0.8451 + 0.3915 + 0.504 + 0.72 + 0.5253 = 2.9858$$

The overall performance score of learning and growth perspective from the descriptive statistical model is 2.98 which almost approach to average score. Idiosyncratically from NFP indicators all performance indicators of LG perspective are under average score. This indicates that there is doubtful performance with respect to LG disparate the other perspective and it requires serious consideration for the fact it could directly attributed for low performance measures in IBP, which implicate with measures of CP and next measures of FP.

**4.5. Overall Non-Financial Performances Perspective**

The final performance score of the three non-financial perspectives calculated by integration the three separate descriptive models stated above. This enables to examine extent of achieving non-financial strategic objectives from different point of view.

$$\text{Descriptive model } F (NFP) = \beta_1 f (CP) + \beta_2 f (IBP) + \beta_3 f (LGP)$$

$$= 51\% (3.603) + 29\% (3.7636) + 20\% (2.2958)$$

$$= 1.8375 + 1.0914 + 0.4591 = \underline{\underline{3.388}}$$

The average overall non-financial performance score is **3.388**, which shows an average level of attaining non-financial objectives. This exposes that Assosa zone MFI should seriously give attention for enhancing non-financial performance, specifically in the indicators of LG in which some indicators only scored average and most of the indicators score even low performance level.

#### **4.6. Overall Performance**

The last descriptive statistics model used in the study to develop overall score of strategic performance is combining all the BSC perspective. The three non-financial perspectives already aggregated on the model of overall NFP. Finally to draw the overall performance index FP and NFP merged and the result is as follows.

$$\text{Descriptive model } PI = WFP f (FP) + WNFP f (NFP)$$

$$= 51\% (3.656) + 49\% (3.388)$$

$$= 1.8645 + 1.6601$$

$$= \underline{\underline{3.5246}}$$

In general, as can be observed from the result, Assosa zone MFIs in are highly performing even if not all 20 performance indicators score high performances or low. This means the entire performance can be advanced by enhancing indicators identified with high, low and average score under each of the four perspectives. However the result still approaches to average performance which needs attention to improve service quality to each particular indicator with low and average performance. Even the study conducted by Eyerusalemkebede (2014) on selected Ethiopian MFI taking the same indicators and the same approach, the result at that time show as those selected MFIs financial and non-financial aggregate performance is high.

## **5. Conclusions And Recommendations**

### **5.1. Conclusions**

The aim of this study is to examine the performance of MFIs by integrating financial and non-financial metrics. This study confirmed that the use of balanced scorecard has high potential in showing a comprehensive performance of MFIs. Considering both financial and non-financial approach in this study is different from the

most of previous performance evaluation studies in Ethiopian MFIs and also adopted descriptive statistical model that enabled to aggregate results of performance indicators of both financial and non-financial. The financial experts of AEMFI and NBE are giving more attention to financial performance than non-financial one. This indicates that the experts are in view of the need of more concentration on profitability and sustainability and less attention to outreach, customer satisfaction and employees performance quality improvement. Though high emphasis given to overall financial performance, the specific weight to each measure provided encouraging view with regard to sustainability rather than profitability, for the fact that more weight to OSS compared to profitability measure (ROA, ROE) may explain more interest on covering operational costs from operating revenue, which ensures independency of donation and subsidy that could make MFIs to have sustainable business models. From the total weight assigned to NFP, customer perspective (CP) received the highest weight. Among customer perspective indicators, the highest weight assigned to PCNC showed high emphasis on breadth of outreach than the depth of outreach which is represented by PWB. This also assured by the likert scale result of PWB which was under very low scale. The lowest weight assigned to R&D also shows that less attention given for assessing and identifying the main factors challenging MFIs performance. Among nonfinancial performance perspective LG have lowest weight that assigned by financial expert and also the summation of its statistical value also show low performance. Thus each variable under learning and growth need improvement by Assosa Zone MFIs. The financial performance of sample MFIs in the study using the developed descriptive statistical model is in interval of high performance based on the developed Likert scale for the study. Particularly out of all the financial performance indicators the highest average score is achieved by OSS which fails under the very high performance category. Although financial performance with over all selected indicators in high performance range, the PaR > 30days the average score is under very low performance category. This means MFIs in BGRS are at very low level of controlling risks in relation to their loan. Repayment rate crucial for loan portfolio quality and it is the most important indicators that, Guide and presents reasonable overview of the performance, the overall risk, financial condition and future potential of microfinance institution. However, as the result of five year data indicate the company has suffered from the largest risk reside from default loan in its loan portfolio. The result of CP failed under the high performance category. But this CP in general likes sharing the average of PCNC with a score of very high performance category. In contrary the percentage of women borrowers (PWB) is in the range of very low performance on depth of outreach. But, as Abate [3] states serving more women tend to be linked with improved financial performance. MFIs under the study performed highly in developing better business process through having a clear institutional strategy, and speedy loan application process, which potentially improve customer perspective through its measured indicators. High performance on RE also shows the good communication culture of the studied MFIs. However result of research and development is under the average performance category. The overall average result of non-financial performance score is an average level of attaining non-financial objectives. This exposes that Assosa zone MFI should seriously give attention for enhancing non-financial performance, specifically the indicators of LG in which most of the variables score low performance level. Even if not all performance indicators score high performances or low under financial and non-financial metrics the summation result is in the range of high performance scale. However the result still nearest to average performance scale which needs attention to improve service quality to each particular indicator with low and average performance.

## **5.2. Recommendations**

Based up on the findings of the study, the following recommendations are forwarded

- The MFIs as well as AEMFI and CBE supervision department should give attention and equal emphases / weight for both financial and non-financial performance to achieve sustainability and outreach objectives.
- In financial performance analysis Assosa zone MFIs faced critical challenge in portfolio quality for its sustainability and to achieve its poverty alleviation objective. The quality of the portfolio is absolutely crucial for sustainability of the micro finance, thus critical effort must be exerted at all levels to minimize this repayment risk and to maintain good portfolio quality.
- Learning and growth has positive relationship with internal business process improvement and customer perspective, which the basic objective of the sector. From the study result learning and growth perspective of Assosa zone MFIs needs to be a prime focus since; LG is the starting point of performance based on BSC. So, Assosazone MFIs expected to improve the LG perspective performance through offering interesting benefit, motivating employees using consistent and value adding training which can empower them with appropriate performance feedback and reward.
- Similarly one of internal business process indicator, research and development show low performance. So, Assosa zone MFIs needs to give due attention to research and development to evaluate the financial and non-financial situation
- Even though the overall average of financial indicators show high level performance, the average value of ROEL is approach to low performance. Thus, since this directly affects OSS the ASsosazone MFIs systematically reduce operating expense when providing loan service.

## **References**

- [1]. Agarwal, P. Financial Performance of Microfinance Institutions in India, A cross Sectional Study. *DelhiBusiness Review* .2010, 11(2), 37-46.
- [2]. Aghion, B., &Morduch. *The Economics of Microfinance*. Cambridge, Mass: London: MIT Press. 2005.
- [3]. Al-Najjar Sabah M. Designing a Balanced Scorecard to Measure a Bank's Performance: A Case Study", *International Journal of Business Administration*, Vol. 3, No. 4. 2012.
- [4]. Annim, S. K. *Microfinance Efficiency Trade-Offs and Complementarities*: University of Manchester Brooks, World Poverty Institute. 2010.
- [5]. Arsyad, L. An Assessment of Microfinance Institutions Performance: The Importance of Institutional Environment. *International Journal of Business*. 2005, 7(3), 391-427.
- [6]. Barres, I.,Curran, L., Nelson, E., Bruett, T., Escalona, A., Norell, D., et al. (2005). *Measuring Performance ofMicrofinance Institutions: A Framework for Reporting, Analysis and Monitoring*. USA: The Seep Network andAlternative Credit Technologies, LLC.
- [7]. Bi, Z., &Pandey, S. Comparison of Performance of Microfinance with Commercial Banks. *AustralianJournal of Business and Management Research*. 2011, 1(6), 110-120.
- [8]. Brau, J. C., &Woller, G. M. 2004. *Microfinance: A Comprehensive Review of the Existing Literature*.

- Journal of Entrepreneurial Finance and Business Ventures, 9(1), 1-26.
- [9]. CGAP. External Audits of Microfinance Institutions: A Handbook (Vol. 2). Washington, USA: Consultative Group to Assist the Poorest (CGAP) 1998.
- [10]. Christen, R., Rosenberg, R., & Jayadeva, V.. Financial Institutions with a Double Bottom Line: Implications for the Future of Microfinance. Washington DC: The Consultative Group to Assist the Poor (CGAP) .2004.
- [11]. Churchill C. and Frankiewicz Cheryl. (2006). Making microfinance work: managing for improved performance“, International Labor Organization, Geneva.
- [12]. Congo, Y. (2002). Performance of Microfinance Institutions in Bukinafaso. USA: World Institute of Development Economic Research. United Nations University.
- [13]. Cull, R., Demirgüç-Kunt, A., Morduch, J., & Microfinance Trade-Offs Regulation, Competition and Financing. Washington, Dc: World Bank. 2009.
- [14]. Dejene. Aredo. Gender and Microfinance in Africa”, Microfinance Development Review .1998, Vol.2, No. 1.
- [15]. Fin Scope. A Survey of the Demand for financial Services in Tanzania. Dar-es-salaam, Tanzania: Financial Sector Deepening Trust (FSDT) .2009.
- [16]. Godquin, M. Microfinance repayment performance in Bangladesh: how to improve the allocation of loans by MFIs. World Development. 2004, 32(11), 1909-1926.
- [17]. Hermes, N., Lensink, R., & Meesters, A. Outreach and efficiency of microfinance institutions. World Development, 2011. 39(6), 938–948.
- [18]. Hossain F. and Knight T. Can microfinance improve the livelihoods of the poor and disadvantaged?“International development planning review. 2008, vol.30, no.2, pp.155- 175.
- [19]. Incofin. Social Performance Report. Belgium: Incofin Investment Management. 2011.
- [20]. Kablan, S. Microfinance Efficiency in the West African Economic and Money Union, Have reforms Promoted Sustainability or Outreach. Germany: University Library of Munich. 2012.
- [21]. Kaplan, R.& Norton, D.The Balanced Scorecard: Measures that drive performance. Harvard Business Review.1992.71-80.
- [22]. Kaplan, R.S., & D.P. Norton. The Balanced Scorecard: Translating Strategy into Action“, Harvard Business School Press, Boston. 1996.
- [23]. Kaplan, R.S., & D.P. Norton.The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment’, Harvard Business School Press, Boston. (2001)
- [24]. Kaplan, R. S., & Norton, D. P.Measuring the strategic readiness of intangible assets.Harvard Business Review. 2004, 82(2), 52-63.
- [25]. Kaplan, R.S., & D.P. Norton. Alignment: Using the Balanced Scorecard to Create Corporate Synergies“, Harvard Business School Press, Boston. 2006
- [26]. Kipasha, E. F. Production and Intermediation Efficiency of Microfinance Institutions in Tanzania. Research Journal of Finance and Accounting. 2013. 4(1), 149-159.
- [27]. Knapp (2001).The Balanced Scorecard: Historical Development and Context, As Developed by Robert Kaplan & David Norton“, Foundations of Management, Anderson University.
- [28]. Kothari C.R. Research methodology methods and techniques, New age international, New Delhi. 2004.



- [29]. Lapenu C., Zeller M., Greeley M., Chao-Béroff R., Verhagen K. « Performances sociales: uneraison d'être des institutions de microfinance et pourtant encore peu mesurées. Quelques pistes », *Mondes en développement*. 2004, 32 (126), pp 57-74.
- [30]. Ledgerwood, J. *Microfinance Handbook: Sustainable Banking for the Poor. An Institutional and Financial Perspective*. Washington, DC: The World Bank. 2001.
- [31]. Marr, A., & Tubaro, P. *Escape the Low Growth Trap? Microfinance in Tanzania*. UK: The University of Greenwich. 2011.
- [32]. MFC. *From Mission to Action. The Strategic Management Toolkit Handbook: Management Series for Microfinance Institutions*. Microfinance Center (MFC) <http://inthiseconomy.org/SPTF/docs/MFCsHandbookonBalancedScorecardandStrategicMgtofMission.pdf>. 2007.
- [33]. Morduch, J. The Microfinance Schism. *World Development*, 2000, 28, 617-629.
- [34]. Mustafa, A.K.A & Saat, M.M. (2013). Microfinance Institutions Performance Measurement: Introducing a New Performance Measurement Framework, *Middle-East Journal of Scientific Research*, vol.15 no. 11, pp. 1618-1628.
- [35]. Nyamsogoro, G. Microfinance Institutions in Tanzania: A Review of Growth and Performance Trends. *The Accountant Journal*, 2010, 26(3), 3-16.
- [36]. Panicker Sunita and Vinita Seshadri .(2013). Devising a Balanced Scorecard to determine Standard Chartered Bank's Performance: A Case Study", *International Journal of Business Research and Development*, Vol. 2, No. 2, pp. 35-42.
- [37]. Robinson M. (2001). *The Microfinance Revolution; Sustainable Finance for the Poor*", Vol.1 Washington D.C, The World Bank.
- [38]. Rosenberg, R. *Microfinance Institution Minimum Indicators that Donors and Investors Should Track*. Washington DC: The World Bank. 2009.
- [39]. Sajeda A, Ashok S. R. Giorgio T. Does microcredit reach the poor and vulnerable? Evidence from northern Bangladesh. *Journal of Development Economics*. Elsevier Ltd .2010.
- [40]. Triodos Facet. *Tanzania Microfinance Country Survey Scan*. The Netherlands: Triodos Facet. 2011.
- [41]. Toker, & Miles. (2004). Financial Performance of Microfinance Institutions, A Comparison of Performance of Regional Commercial Banks by Geographic Regions. *Journal of Microfinance*, 6(1), 41-54.
- [42]. Wisner, P. *Multi-dimensional performance measurement using the balanced scorecard*. Finance: The Ultimate Resource. USA: Bloomsbury Press. 2009.
- [43]. Yitay Elema Boru (2011). *Assessment of Institutional Performance and Sustainability of Selected Microfinance Institutions: A Data Envelopment Analysis Approach*, Ethiopia
- [44]. Zeller, M., Lapenu, C., & Greeley, M. *Social performance indicators initiative (SPI). Initiating memorandum*, Washington DC: Consultative Group to Assist the Poorest (CGAP), 2003.
- [45]. Muluken and Mesfin, *Assessment of Factors Affecting the Performance of Microfinance*
- [46]. *Institutions: The Case of Hawassa City*, 2014. Vol.6 No. 1