International Journal of Commerce and Finance, Vol. 6, Issue 2, 2020, 170-178

COMPREHENSIVE PERFORMANCE MEASUREMENT FOR MICROFINANCE INSTITUTIONS IN ETHIOPIA

Eyerusalem Kebede REFERA

Kotebe Metropolitan University, Addis Ababa, Ethiopia

Received: Sept 03, 2020 Accepted: Sept 26, 2020 Published: Oct 02, 2020

Abstract

This study develops comprehensive performance measurement for microfinance institutions which incorporate both financial and nonfinancial metrics using balanced score card approach (BSC). The BSC framework of the study developed using a total of 20 performance indicators categorized under the 4 BSC perspectives (financial, customer, internal business process and learning and growth). The performance measurement model is developed based on reviewed literatures and after the comprehensive performance measurement descriptive model developed, 10 microfinance experts of national bank of Ethiopia (NBE) and association of Ethiopian microfinance institutions (AEMFI) gives weight for each BSC perspective and for each twenty performance indicators. Furthermore since financial performance are commonly measured using ratios and numbers to measure a comprehensive performance and to make financial and non-financial performance parameters comparable the experts asked to develop a bench mark to convert financial performance parameters in to 5 point Likert scales. Finally the study provide a BSC based performance measurement framework that will give a comprehensive view on the financial and non-financial performance.

Keywords: *Microfinance, Performance, Balanced Score Card (BSC)*

1. Introduction

Microfinance has obtained a universal avowal as an important tool for poverty alleviation in many developing countries. The basic purpose of the microfinance institutions (MFIs) is to provide basic financial service the poor. The MFIs had remained with government and not for profit organizations because of primacy of social objective in a mission. However the potential profits and sustainability of lending to the poor, if done skillfully, had attracted conventional commercial banks and private investors. This triggered an optimal balance between social and business objective in the sector. Literature on the need for balancing outreach and sustainability has been growing (Abrar, 2019; Schmied, 2012; C. Bartual Sanfeliu et al, 2013; Efendic & Hadziahmetovic, 2017), but few have been done on applying performance management techniques facilitating balancing multiple and conflicting objectives such as the Balanced Score Card (BSC) in MFIs, especially in Ethiopia context

Literature on the need for balancing outreach and sustainability has been growing (Abrar, 2019; Schmied, 2012; C. Bartual Sanfeliu et al, 2013; Efendic & Hadziahmetovic, 2017), but few have been done on applying performance management techniques facilitating balancing multiple and conflicting objectives such as the Balanced Score Card (BSC) in MFIs, especially in Ethiopia context.to date to explore the possibility of applying performance management techniques which help in measuring and managing the multiple and sometimes conflicting performance indicators peculiar to MFIs. The purpose of the current study is to explore possibility of using BSC in Ethiopia MFIs. current research, hence aimed at examining the possibility of using a balanced score card (BSC) approach as a comprehensive measure of performance and maintaining optimum balance between the social and business objectives peculiar in the sector in the context of MFIs in Ethiopia. credit facilities on affordable interest rates. This industry has a dual mission that is to expand its social outreach and at the same time maintain its financial sustainability (Abrar, 2019; Schmied, 2012; C. Bartual Sanfeliu et al, 2013; Efendic & Hadziahmetovic, 2017).

The MFIs has been growing and reached an estimated 139 million low-income and underserved clients with a loan totaling an estimated $ 114 million. The growth in MFIs has attracted conventional commercial banks and other financial institutions which raised a challenge of creating optimal balance between the initial social objectives to the needs of return by private investors taking part in the sector. Previous studies in the performance of MFIs focused on identifying the possibility of balancing conflicting objectives

The Balanced Score Card (BSC) approach which is developed by Robert Kaplan and David Norton in 1992G.C is a comprehensive approach to analyze overall performance of an organization. In addition to the traditional financial performance measures which only provides information about how well the organization did prior to the assessment, the BSC approach create an opportunity to integrate additional performance dimensions related to how the organization respond to the needs of the customer, and employees as well as explore opportunities to improving internal business process and capitalized on the organizational learning and growth opportunities. The adoption of BSC in the measurement of performance in MFIs is expected to observe how far performance measures are linked to its strategic goal and mission. The current study; hence, contribute to literature on microfinance performance in Ethiopia and other developing countries by categorizing existing and newly introduced performance measures and indicators under the four dimension of BSC. The study benefits management and policy makers of MFIs by providing compressive view of organizational performance and its adherence to overall strategy. The specific addressed the following specific objectives of the study are as follows:

1. To study existing literature on microfinance performance and categorize the social and business objectives under the four perspectives of BSC
2. To study the existing literature on Balanced scorecard and explore the possibility of adopting BSC in the measurement and management of performance in Ethiopian MFIs
3. To develop a BSC approach applicable to the measurement and management of performance in Ethiopian MFIs

2. Literature Review

2.1 Performance Measurement in MFIs

Robinson (2001) define microfinance as all types of financial services (savings, credit, funds transfer, insurance, pension remittances, etc.) offered to low-income households and enterprises in both urban and rural areas, including employees in the public and private sectors and the self-employed. Churchill & Frankiewicz (2006) articulated that MFIs are associated with small, working capital loans that are invested in microenterprises or income-generating activities. This is similar with the case in Ethiopia, defined by Dejene (1998) in terms of the following characteristics: targeting the poor (especially the poor women); promoting small businesses; building capacity of the poor; extending small loans without collaterals; combining credit with savings; and charging commercial interest rates and also they are often innovative and flexible in their design and implementation.

The science of organizational performance management showed a pragmatic shift from only financial performance to multiple performances which called for modern approaches such as the Balanced Score Card (BSC), developed by Robert Kaplan and David Norton in 1992 to connect performance and strategy. BSC have been experimented in various sectors, but few work available in MFIs. The review of performance measures on MFIs, discussed in the below section, has been conducted to identify performance measures of MFIs and categorized them under indicators of BSC so to develop a BSC framework for MFIs.

Consultative Group to Assist the Poor (CGAP), an international organization with a basic objective of supporting the development of micro financing around the world, has recommended to five performance dimensions to be considered in MFIs. These are financial sustainability, outreach, and depth of outreach, portfolio quality, and efficiency.

I. Sustainability and Profitability: Sustainability measures the ability of MFIs to stay with productive efficiency and generate sufficient profits in ordinary business without subsidies. Sustainability and profitability are directly related in commercial organizations. Yet, sustainability of MFIs had been viewed differently. Profitability is considered as source of sustainability when MFIs are more profit oriented whereas external grants and concessional funds from donors can be in case of greater importance of social objective. The observed changes in microfinance sector, namely the growing interest of private investors and declining external grants and concessional funds suggested the need for ensuring operational efficiency and profitability in the sector without significantly hampering social objective of serving the poor or the outreach.

II. Breadth and Depth of Outreach (BDO): Outreach refers to the efforts of MFIs in increasingly satisfy the finical service demand of poor, marginalized by mainstream financial institution. It is measured in terms of breadth and depth. According to Lafourcade et al. (2005), depth of outreach measures how far MFIs had targeted and served client the most vulnerable groups of client such as women and other with very low income. On the other hand, breadth of outreach measures the number of clients served by the MFIs. It is thus; evident that outreach is related with social objectives of MFIs.

III. Portfolio Quality (PQ): Portfolio quality is a crucial area of performance indicator for the fact that the largest source of risk for any financial institution resides in its loan portfolio. The loan portfolio quality affect MFI's largest asset and the quality of that asset which poses risk on the institution is a serious issue. Especially for microfinance institutions, whose loans are typically not backed by bankable collateral, the quality of the portfolio is absolutely crucial. The most widely used measure of portfolio quality in the microfinance industry is Portfolio at Risk (PaR), which measures the portion of the loan portfolio "contaminated" by amount overdue as a percentage of the total portfolio.

IV. Efficiency and Productivity (EP): Efficiency and productivity indicators are performance measures that show how well the institution is streamlining its operations. Productivity indicators reflect the amount of output per unit of input, while efficiency indicators also take into account the cost of the inputs and/or the price of outputs. Tor Jansson et al. (2003) explains that MFIs have much lower rates of efficiency than commercial banks because on a dollar per dollar basis microcredit is highly labor intensive and a hundred-dollar loan requires about as much administrative effort as a loan a thousand times larger. In addition economies of scale have much less impact on efficiency in MFIs than is usually believed because of the high variable costs of the microcredit system.

2.2. Balanced Score Card (BSC)

Balanced Scorecard (BSC) is strategic formulation and performance measurement technique developed by R.S Kaplan and D.P Norton in 1996. As stated by Knapp (2001) the Balanced Scorecard management approach developed by Kaplan & Norton is based upon several foundational management theories. BSC translates an organization's mission and strategy in to a set of performance measures that provides the framework for implementation. BSC does not focus solely on achieving short run financial objective. It also highlights the non-financial objective that an organization must achieve to meet and sustain its financial objectives. The tool is called balanced scorecard because it balance the use of financial and non-financial performance measures to evaluate short run and long run performance. The BSC approach sees the performances of any organization or association from four perspectives, namely: Financial Perspective, Customer Perspective, Internal Business Process, Learning and Growth.

3. Materials and Methods

The study is an exploratory study and conducted using both secondary and primary data. The secondary data including literature related to microfinance performance and balanced score card (BSC), annual reports, and relevant documents of selected MFIs in Ethiopia were used to develop a study framework. Primary data collected from selected employees and management of MFIs, Association of Ethiopian MFIs, and the National Bank of Ethiopia (NBE) were analyzed to examine the relative importance of microfinance performance measures categorized under the four dimension of the proposed BSC for Ethiopian MFIs. The data analysis was carried out using qualitative and descriptive statistical analysis techniques. The results are presented using diagrams, tables and narrative descriptions.

4. Results and Discussion

4.1. Development of Microfinance BSC Framework

The proposed BSC framework attempted to club several financial and non-financial measures of performance under the four performance perspectives in BSC theory of Northon and Kaplan, which intends to link performance measures and strategic objectives of MFIs. Based on the review of literature and researchers personal judgment five measures of performance have been categorized under each of the four BSC dimensions based on the review of literature and researchers judgment.

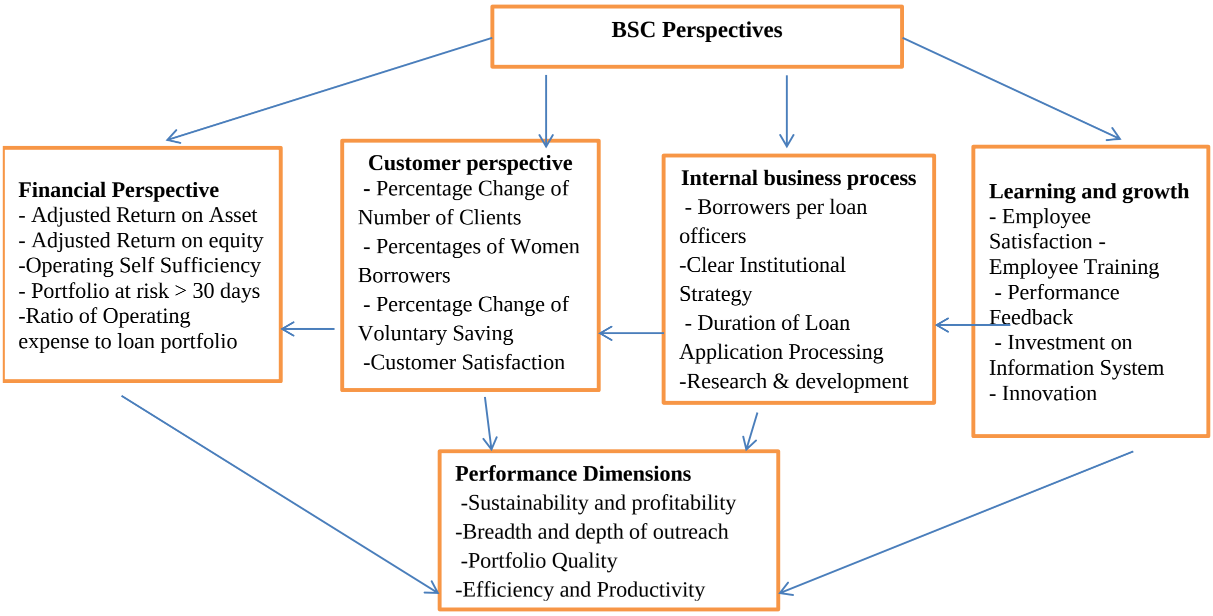

Figure 1: Proposed Comprehensive Performance Measurement Framework
Source: author constructed based the review and analysis of literatures

4.2. Evaluating the proposed BSC for MFIS in Ethiopia

To evaluate whether the proposed BSC framework is suitable to the context of MFIs in Ethiopia and their relative importance in linking performance measures with organizational strategy and dual objective of sustainability and outreach, a questionnaire were distributed to managers of MFIs, and other experts from association of Ethiopian MFIs and the National Bank of Ethiopia, supervisory agency.

As shown in the above framework 20 variables/ indicators of microfinance performance have been categorized under the 4 perspective of BSC. Weights have also been assigned to each measures of performance categorized under each perspectives of BSC Each in order to construct overall indicators of each perspective which finally enables the significance of the suggested performance measures and indicators by managers and experts in Ethiopian MFIs.

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. Beside in order to convert the ratio or numbers in to Likert 5 scale they were asked to set a scale or benchmarks for some indicators which NBE didn't set a scale namely PCNC, PWB, PCVS, BPLO. Based upon their responses the average weights of each perspective were developed that enable to comprise financial and non-financial performance using identical unit of measurement. The weights assigned to performance indicators under each perspective are summarized on table 1 below.

Table 1 Performance Metrics and Average Weights

BSC perspective	Performance Indicator	Sub-weight
Financial performance (58 %)	Adjusted Return on Asset (AROA)	19%
	Adjusted Return on Asset (AROE)	15%
	Operating Self Sufficiency (OSS)	30%
	Portfolio at risk > 30 days (PaR)	18%
	Lone Loss Rate(LLR)	18%
Non-financial performance (42%)		
Customer Perspective (16%)	Percentage Change of Number of clients (PCNC)	26%
	Percentages of Women Borrowers(PWB)	17%
	Percentage Change of Voluntary Saving (PCVS)	25%
	Customer Satisfaction(CS)	17%
	Clear Social Objective (CSO)	15%
Internal Business process (15%)	Ratio of Operating Expense to Loan Portfolio (ROEL)	34%
	Borrowers Per loan officers (BPLO)	19%
	Clear Institutional Strategy (CIS)	25%
	Duration of Loan Application Processing (DLAP)	14%
	Report to AEMFI, NBE….. (RE)	8%
Learning and Growth (11 %)	Employee Satisfaction (ES)	23%
	Employee Training (ET)	19%
	Performance Feedback(PF)	10%
	Investment in Information System (IIS)	33%
	Innovation(I)	15%

Source: survey result and own computation

The result of the survey seen on table 1, above, showed that most respondents, both from NBE and AEMFIs placed higher weights to financial performance and their indicators, unlike the previous study Kipesha (2013) who employed the same approach in the Tanzanian MFIs and found that, experts in his study gave higher weights for non-financial performances.

The other study that could mediate the differences between Kipesha (2013) and the current study is (Nanayakkara and Iselin, 2012) which says MFIs, in their performance reporting, give the most emphasis to the financial perspective of the BSC. Beside Kipesha used opinion of the studied MFIs mangers in Tanzania unlike the current study which used independent experts in supervisory institution and industry association might explain the difference of weight assigned to financial and non-financial performance measures in this two study. For the fact the opinion of independent professionals were used in determining weight to be assigned in the current study, the management biases in identifying higher weights to performances measures and dimensions is believed to be minimum in this study.

It could also be observed from the results on table 1, profitability and sustainability of Ethiopian MFIs, categorized under financial perspective in the BSC model in this study, should the major area of concern as per the opinion of experts at MFIs supervision division of NBE and AEMFIs. Previous studies on performance of Ethiopian MFIs (Kereta, 2007; Yisraw, 2008; Letena, 2009; Abate, Borzaga & Getnet, 2013) consistently found encouraging performance with respect to sustainability and profitability though variation across institutions of different size. Taking the findings of previous studies, it could be inferred that, the need for better profitability and sustainability of MFIs in Ethiopia is given a higher emphasis. So far, as it couldn't diverse outreach objective, profitability and sustainability are desirable. In this regard as well, previous studies showed Ethiopian MFIs had been performing well in terms of outreach indicators. (Bamlaku, 2006 & Kereta, 2007) and a study by Kereta (2007) reported there was no tradeoff between sustainability and outreach. Nevertheless, to this low performance in depth of outreach reported by Letena (2009), may raise a doubt on possible negative consequence of high emphasis for financial performance. Further, the trade of between sustainability and outreach on Letena (2009) and the concern of Yesraw (2008) on the sustainability of small sized MFIs that had a better outreach is also be the underpinning for high emphasis on financial performance in Ethiopian MFIs.

4.3. Weight Assignment for Performance Indicators in BSC Perspectives

Based on a 100%, the expert participated in the survey provided a higher weight to financial performance (52%). Five major financial performance measures were presented for the experts to divide total weight of 100% to each of these five measures. As shown on table 1 above, on average operating self-sufficiency (OSS) received the highest percentage (30%) followed by adjusted rate of return on asset (19%). Portfolio at risk and loan loss rate each received 18% each. The lowest weight, 15% was assigned to adjusted rate of return on asset. Though high emphasis given to overall financial performance, the specific weight to each measure provided favorable view, for the fact that the more weight to OSS compared to profitability measure (AROA, AROE) may explain more interest on covering operational costs from operating revenue, which ensures independency of donation and subsidy that could make the MFIs to have sustainable business models. This can be strengthening by the lowest weight given to AROE compared with even indicators of portfolio quality.

Based the opinion of managers and experts the non-financial perspectives was given to account for 42% of the overall weight assigned to financial and non-financial dimensions of BSC. The weight assigned for various components of NFP are as follows:

Of the total of 42 % weight assigned to NFPs, customer perspectives (CP) received the highest weight (16%). Experts were also asked to allocate a total of 100% to five measures of customer perspective. As shown on table 4.1, above, on average PCNC received the highest percentage (26%) followed by PCNC (25%), PWB and CS receive 17%. The lowest weight, 15% was assigned to CSO.

Internal business Process: The second NFP, learning and growth were given 15% out of a 100 % that experts provided with respect to the three NFP. Five internal business process measures were also presented for the experts to divide a total weight of 100% to each. As shown on table 4.1, above, on average ROEL received the highest percentage (34%), followed by CIS (25%). BPLO and DLAP were also received 19 % and 14% respectively. Yet the lowest weight, 8% was assigned to RE.

Learning and Growth Under the non-financial perspective based on a 42%, the expert participated in the survey provided (11%) to learning and growth. Five major internal business process measures were presented for the experts to divide total weight of 100% to each of these five measures. Observed from table 4.1, on average IIS received the highest percentage (33%) followed by ES (23%). Whereas, ET, I and received 19 %, 15%, and 10% respectively.

4.5. Evaluating Financial Performance Measure Using

After a weighting given to performance dimensions and parameters since some financial and non-financial performance are measured using different parameters converting numbers and ratios in to Likert scale is relevant to make it comparable. With the exception of PCNC, PWB, PCVS, BPLO financial parameters already have an equivalent scale developed by national bank of Ethiopia. Based on the opinion of experts from the MFIs, association of Ethiopian MFIs and NBES the ratios have been rated using a five point Likert scale, as shown in table 2.

Table 2: Benchmarks to Change Ratios and Numbers in to Five Point Likert Scale

FP Indicators	5	4	3	2	1
AROA	>3%	2% to3%	1% to1.9%	0% to 0.99%	< 0%
AROE	>20%	15%-20%	10% to14%	0% to9%	< 0%
OSS	>130%	120% to129%	100% to 119%	90% to99%	0% to 89%
ROEL	0% to20%	21% to25%	26% to30%	31% to 40%	>41%
PaR > 30 Days	0% to3%	3.1% to 6%	6.1% to 9 %	9.1% to12%	>12%
PCNC/B	20% to 30%	15% to 19%	10% to14%	5% to9%	<5%
PWB	‟> 45%	45% to 40%	39% to35%	34% to30%	< 30%
PCVS	35% to 30%	29% to 25%	24% to15%	4% to14%	<4%
BPLO	800 to 700	699 to 600	599 to 500	499 to 400	<400

Source: survey result and own computation, secondary data from NBE

5. Conclusion

BSC is capable of giving comprehensive or holistic picture of performances of MFIs. Therefore, the government (through the regulatory organ) should introduce a system that will enable MFIs operating in the country to use different dimensions of BSC performance measures together with financial performance measures.

AEMFI should support and build the capacity of MFIs towards using BSC in measuring their performance, for example through revising their performance reporting content. The use of BSC will give the management of any organization a comprehensive view on the financial and non-financial performance. So, the management of MFIs should introduce and study the use of BSC in measuring their respective performance.

References

Abate G. T., Borzaga C., & Getnet K. (2013). Financial sustainability and outreach of microfinance institutions in Ethiopia: does organizational form matter? Euricse Working Paper #56

Alemayehu Yirsaw (2008). The performance of Micro Finance Institutions in Ethiopia: A case of six microfinance institutions, Msc thesis, Addis Ababa University

Al-Haidi A.M. (2009). Evaluating the Self-Sustainability of (MFIs) using the Balanced Scorecard Approach, MBA thesis, Sana‟a University

Anthony, R. J, & Govindarajan, V. (2007). Management Control Systems, New York.

Atikus investments incorporated Microfinance status report 2014, New York University

Arega Seyoum (2007). Assessment of the Financial and Operating Performance and Challenges of MFIs in Addis Ababa, MSc. thesis, Addis Ababa University

Bamlaku Alamirew Alemu. (2006). Micro financing and Poverty Reduction in Ethiopia, Internship Report, Internship Program of IDRC, ESARO, Nairobi

Befekadu B. Kereta. (2007). Outreach and Financial Performance Analysis of Microfinance Institutions in Ethiopia, paper presented on African Economic Conference, United Nations Conference Center (UNCC), Addis Ababa, Ethiopia

Brancato, C. K. (1995). New Performance Measures, NewYork Conference Board Report,

Bruno Olivier. (2011). Compulsory versus Voluntary Savings as Incentive Mechanism in micro lending Contracts, Business research and development, Vol. 2, No 2, pp.35-42.

Churchill C. & Frankiewicz Chery. (2006).Making microfinance work: managing for improved performance, International Labor Organization, Geneva

Degefe Duressa Obo. (2009). Microfinance in Ethiopia Elixir or poison?, PhD thesis, The Hague, Netherland

Dejene Aredo (1998). Gender and Microfinance in Africa, Microfinance Development Review, Vol.2

Hossain F. and Knight. T.(2008). Can microfinance improve the livelihoods of the poor and disadvantaged?, International development planning review, vol.30, no.2, pp.155-175.

Kaplan, R., & Norton, D.(1992). The Balanced Scorecard: Measures that drive performance, Harvard Business Review, Boston

Kaplan, R.S., & D.P. Norton (1996). The Balanced Scorecard: Translating Strategy into Action, Harvard Business School Press, Boston

Kaplan, R.S., & D.P. Norton. (2001).The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment, Harvard Business School Press, Boston

Kaplan, R.S., & D.P. Norton 2006, Alignment: Using the Balanced Scorecard to Create Corporate Synergies. Harvard Business School Press, Boston

Kaplan, R.S. & D.P. Norton.(2008). The Execution Premium – Linking Strategy to Operations for Competitive Advantage, Harvard Business School Press, Boston

Kaplan, R.S., and D.P. Norton 2004, Strategy Maps: Converting Intangible Assets into Tangible Outcomes, Harvard Business School Press, Boston

Kipesha E.F.(2013). Impact of Size and Age on Firm Performance: Evidences from Microfinance Institutions in Tanzania, Research Journal of Finance and Accounting, Vol.4, No.5, pp.105-116

KipeshaE.F. & Xianzhi Zhang. (2013). Sustainability, Profitability and Outreach Tradeoffs: Evidences from Microfinance Institutions in East Africa, European Journal of Business and Management, Vol.5, No.8, pp.136-148.

Knapp. (2001). The Balanced Scorecard: Historical Development and Context, As Developed by Robert Kaplan & David Norton, Foundations of Management, Anderson University

Lafourcade, Jennifer Isern, Patricia Mwangi, and Matthew Brown. (2005). Overview of the Outreach & Financial Performance of Microfinance Institutions in Africa‟, Mix market

Letenah Ejigu (2009). Performance Analysis of a sample Microfinance Institutions of Ethiopia, PhD thesis, Panjab University, Chandigarh.

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.

Nanayakkara & Iselin Errol R. (2012). An Exploratory Study of the Performance of Micro-financing Institutions Using the Balanced Scorecard Approach, International Journal of Business & Information, vol. 7, no. 2, pp.165-204.

Olasupo M. A. & Afolami Carolyn A. (2013). Technical efficiency of microfinance banks in South- West Nigeria: Input and output oriented measures, Net Journal of Business Management, Vol. 2

Wolday Amha & Anteneh Kifle. (2013). performance analysis report, bulletin # 9, Association of Ethiopian microfinance institutions (AEMFI), Addis Ababa

Bartual Sanfeliu, R. Cervelló Royo, I. Moya Clemente. (2013). measuring performance of social & non-profit Microfinance Institutions (MFIs): An application of multi criterion methodology, Mathematical and Computer Modeling, vo. 57, 1671–1678,

Schmied, J. (2012). Financial Performance and Social Goals of Microfinance Institutions, Potsdam economic paper 2, Potsdam University Press [online] athttp://verlag.ub.uni-potsdam.de/