

Exploring the Effect of Balanced Scorecard Implementation on the Performance of Selected Micro-Finance Institutions in Nigeria: A Study of North Eastern Geopolitical Zone.

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Abstract

This research aimed at exploring the effect of Balanced Scorecard implementation on the performance of selected Microfinance Institutions in Nigeria: North-Eastern Geopolitical Zone as a Study Area. *The BSC framework of the study developed using a total of 20 performance indicators which were equally categorized under the 4 BSC perspectives (financial, customer, internal business process and learning and growth). The developed framework applied to purposively selected 8 MFIs operating in Nigeria which have head office in each state capital of North-Eastern states region and report to Association of Nigerian Microfinance Institutions (ANMFI) starting from 2019-2024 consecutively. Quantitative research approach adopted and primary data collected using five scale Likert and secondary data obtained from ANMF used. A total of 12 microfinance experts, 130 staffs and 75 clients contributed in the research. The analysis is done using descriptive statistics and SPSS version 21 used. The findings of the research indicates based on financial performance results, on average the institutions go through were sustainable with high relative productivity and efficiency and reasonable profitability. The average nonfinancial performance was also high, indicating that the studied institutions were highly performing in nonfinancial measures likewise the financial. Alongside the performance results, the findings of this research confirmed the relationship assumption of BSC perspectives and it demonstrations of positive correlation among them. The research concludes comprehensive performance is observed when measured in a collective way. So, Nigerian MFIs in the North-Eastern States suggested paying attention on the use of BSC as a performance measurement tool and also center to specified performance indicators that needs enhancement. The research recommends that the government (through the regulatory organ e.g. CBN) should introduce a system that will facilitate MFIs operating not only in North-Eastern States Region but in the country as a whole to use different measurements of BSC performance indicators together with financial performance processes. The Central Bank of Nigeria (CBN) 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 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.*

Key words: *Microfinance, Performance and BSC*

1.1 Introduction

Tehrani, Mehrgan, and Golkani (2012) stated that evaluating organizational performance through balanced scorecard is considered a useful phase in accomplishing a self-assessment strategy and therefore enhancing accountability and transparency power. In the literature, performance evaluation has been considered as one of the most important techniques in introducing and utilizing the accountability and transparency approach. However, there is a need for some indicators through which the organization's performance can be assessed. Performance evaluation indicators are in fact an action guide from 'what it is' towards 'what it should be'. Evaluating the performance of organizations is considered as a guideline that paves the way for future decisions, investment, development, and, most importantly, control and supervision.

The implementation of Balanced Scorecard (BSC) as a performance evaluation system and a strategic management tool is an area which has had limited research coverage (Tuomela 2005; and Malmi 2001). Exclusively, in the framework of microfinance institution (MFIs) is very insignificant, both on strategic management and microfinance performance literatures notwithstanding limited recent studies have witnessed the importance of BSC in improving performance management and assessment system in MFIs Kipsha 2013b; Nanayakkara & Iselin 2012; Al-Haidi 2009).

Few of the innovatory works that aimed at introducing BSC in MFIs underscored that the dual and sometimes appeared incompatible, strategic goals in MFIs: sustainability and outreach are not well addressed in the current performance management and evaluation architecture of the sector. They argued that the BSC approach which proposes to create a link between performance measure, performance indicators and institutional strategy is of a capacity to accommodate the multiple financial and nonfinancial performance measures in

microfinance to be viewed in their respective contributions to organizational strategies evaluation. The purpose of this study is dual in one side to develop a balanced Scorecard approach performance evaluation framework to MFIs and on the other to evaluate the performance of selected Nigerian MFIs using the developed BSC framework.

1.2 Statement of Research Problem

Nowadays, there are several techniques that can be applied in order to assess organizations performance. Neves and Lourenço (2009) suggested that the oldest and the most commonly used technique is financial ratio analysis such as (Profitability, Liquidity, Leverage and Solvency). However, numerous organizations are highly dependent on financial measures for assessing performance, although depending on financial perspectives to assess performance can be misleading for the decision-makers and can cause the organization to deviate from the correct route. Additionally, Wang, Li, Jan, and Chang (2013) demonstrated that depending on a single indicator in evaluating organization performance provides biased information.

It has been demonstrated that relying on the financial indicators to evaluate performance has many disadvantages; firstly, financial indicators can be easily manipulated and are short-term oriented, which in turn provides misleading information (Atkinson & Brander Brown, 2001; Johnson & Kaplan, 1987; Phillips, 1999). Secondly, from the competitive environment view, financial indicators do not take into consideration strategic improvement and innovation activities (Ittner & Larcker, 1998; McPhail, Herington, & Guilding, 2008; Sainaghi, 2013). Thirdly, in some industries, especially hotels, financial measures are insufficient for evaluating their performance, as these industries are customer-oriented (Kaplan & Norton, 2001b). Finally, financial indicators do not take into consideration future issues and depend mainly on historical data. Hence, in order to have a holistic

Exploring the Effect of Balanced Scorecard Implementation on the Performance of Selected Micro-Finance Institutions in Nigeria: A Study of North Eastern Geopolitical Zone.

view of long-term performance, organizations are motivated to take non-financial perspectives into consideration when assessing their performance (Ramanathan & Ramanathan, 2011). Consequently, in 1992, Norton and Kaplan introduced the BSC as a performance measurement technique. Kaplan and Norton suggested that four different perspectives should be included when using the BSC, namely the financial perspective, the customer perspective, the internal business perspective, and the learning and growth perspective. The BSC is the most commonly applicable technique which recommends the holistic evaluation of organizational performance using the four perspectives. Hence, managers have argued that the BSC should be applied in order to take into consideration these various measurements. Additionally, the BSC supports organizations' strategies and helps them to achieve their objectives by developing specific indicators to support each goal. The usefulness of applying the BSC has been addressed by numerous studies (De Geuser, Mooraj, & Oyon, 2009; Khozein, 2012; Lesáková & Dubcová, 2016; Lucianetti, 2010; Senarath & Patabendige, 2015). It has been shown that applying the BSC in organizations has numerous advantages, such as offering criteria related to strategies which can play a motivational and control role, assisting managers to link the control function with the organization's strategies, and associating the financial plans with strategies, as it includes the financial perspective as one of the four dimensions (Michalska, 2005).

1.3 Objective of the Study

The main objective of this study is to develop a balanced scorecard approach performance rating framework to be implemented in Nigerian MFIs and to evaluate the performance of selected Nigerian MFIs using the developed BSC framework.

This study is conducted with the following specific objectives:

1. To develop and apply a BSC performance evaluation framework for Nigerian MFIs.
2. To test the applicability of BSC through the fulfillment of basic BSC assumptions in the Nigerian MFIs.

1.4 Research Hypothesis

In order to test the applicability of BSC in case of MFIs, the fulfillments of basic BSC assumptions are considered and the following hypotheses are developed.

H1: There is positive correlation between learning and growth (LG) and internal business process (IBP).

H2: There is positive correlation between internal business process (IBP) and Customer perspective (CP).

H3: There is positive correlation between Customer perspective (CP) and financial performance (FP).

H4: There is positive correlation between financial performance (FP) and non-financial performance (NFP).

2.0 LITERATURE REVIEW

2.1 Introduction

This section of the research aimed at providing a theoretical overview and empirical evidences on performance evaluation of MFIs. Studies from different countries, specifically from around the globe and also studies apply BSC to analyze the performance of MFIs reviewed in convenient way. The first part presents theoretical review, then followed by empirical reviews of the literatures.

2.2 Microfinance

The definition of Micro-finance anticipated by different scholars and organizations are slightly different from one another. However, the core perceptions of the elucidation are similar. Given that the terms microfinance and micro-credit are often used interchangeably, it is important to

Exploring the Effect of Balanced Scorecard Implementation on the Performance of Selected Micro-Finance Institutions in Nigeria: A Study of North Eastern Geopolitical Zone.

define each term separately and thereby see what they cover. Microcredit is one of the financial services namely the loans which include the act of providing loans of small amounts to the poor and other borrowers that have been ignored by commercial banks whereas microfinance is the practice of providing a variety of financial services that target low-income and poor clients. So, microcredit is just one type of service under microfinance.

Robinson (2021) explain microfinance as all types of financial intermediation services (savings, credit, funds transfer, insurance, pension remittances, etc) offered to low-income households and enterprises in both city and rural areas, including employees in the public and private sectors and those who are self-employed.

Churchill & Frankiewicz (2016) expresses microfinance as commonly associated with small, working capital loans that are invested in microenterprises or income-generating activities. Hossain & Knight (2008) also defined microfinance as the supply of loans, savings, and other basic financial services to the poor and they noted that microcredit, a central theme of microfinance, is broadly recognized as the practice of offering small, collateral-free loans to members of cooperatives who otherwise would not have access to the capital necessary to begin small businesses.

Dejene (1998) also well-defined Microfinance Institutions (MFIs) 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; uniting credit with savings; and charging commercial interest rates and also they are often inventive and flexible in their design and implementation. In a nut shell from all the above definitions, it is possible to conclude MF is financial service centered on the poor and the typical microfinance clients are low-income employed persons or house hold based

entrepreneurs, those do not have access to formal financial institutions.

2.3 Balanced Scorecard

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, including:- Management by objectives (Drucker 1954); Principles of management (Fayol 1916); Open-book management (Case 1995); Leading change (Kotter 1996); Theory Y (McGregor 1960); Hierarchy of needs (Maslow 1962); and Value disciplines (Treacy & Wiersema 1995).

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.

As Modell (2011) state the development of BSC can be traced through the gradual evolution of the BSC as a strategic management system (Kaplan & Norton 1996) into comprehensive strategy maps (Kaplan & Norton 2001, 2004) and vehicles of corporate-wide strategic alignment (Kaplan & Norton 2006). The BSC approach sees the performances of any organization or association from four perspectives and the following is a description of the BSC perspectives based on Kaplan and Norton (1996).

2.3.1 The Four Perspectives of the Balanced Scorecard

One of the most famous and significant characteristics of the BSC is its perspectives framework. Kaplan and Norton (1992)

Exploring the Effect of Balanced Scorecard Implementation on the Performance of Selected Micro-Finance Institutions in Nigeria: A Study of North Eastern Geopolitical Zone.

categorized the BSC into four main perspectives, as shown in Figure 2.1. This figure explains the main question which each perspective seeks to answer, or in other words, it shows the objective of each perspective. Firstly, the financial perspective measures the final results provided to shareholders, owners, and government and represents the organization's long-term objective (Farooq & Hussain, 2011). Secondly, the customer perspective concentrates on customer requirements, satisfaction, and market share. It is considered as the main perspective of most applied BSC systems. Thirdly, the internal business process perspective directs attention to the performance of the internal business process. It includes the procedures that the organization must develop and align to be successful (Farooq & Hussain, 2011).

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Finally, the learning and growth perspective focuses on future success, people in the organization and the organization's infrastructure. Each of these perspectives has certain measures, which has a cause and effect relationship with others. The learning and growth perspective is considered as the backbone to the successful implementation of the BSC.

The scope of these perspectives was designed to cover all activities, whether internal or external, current or future (Alharbi, Atkins, Stanier, & Al-Buti, 2016; Anand et al., 2005; Ardabili, 2011; Hoque, 2014; Kaplan & Norton, 1996; Kootanaee et al., 2013; Park & Gagnon, 2006; Rostami, Goudarzi, &Zaj, 2015; Sundin, Granlund, & Brown, 2010; Tabari &Araste, 2008).

3.0 METHODOLOGY

Research is a systematic inquiry that helps to solve the existing or expected problems or to explain undiscovered facts by giving direction to the solution or by creating new knowledge. Quantitative research approach which is adopted in this study is an approach in which the investigator primarily uses postpositive claims for developing knowledge, i.e., cause and effect relationship between known variables of interest (Creswell 2003). Quantitative research has two strategies of inquiry the first one is survey design which provides a quantitative or numeric description of trends, attitude or opinion of a population by studying a sample with the aim of generalizing about the population and the other experimental design used to test the effect of intervention on an outcome, controlling all other factors which may influence that outcome. The

population of the study consists of all microfinance institutions in North Eastern Region. Currently as of October 2020, there were 33 MFIs operates in North Eastern Geopolitical Region and in different states in each of the 6 states of the region. The survey instruments questionnaires, in this study developed by the researcher based on basic BSC theories and review of related literatures. The respondents are the three groups. The first are the experts from CBNMF supervision department and ANMFI. The second are the staffs of the selected MFIs and the third are the clients. The questionnaires contain scaling and had only close ended questions and developed using five scale Likert model. The researcher selects Likert scale method of questing because of the following reasons. First the response options covered 360 means from positive to negative dimension only precise wording is vary. Second the responses are comparable across different questions since the same numerical codes assigned. It is also possible with multiple items on the same broad object these codes can be summed or averaged to give an indication of each respondent's overall positive or negative point of reference towards that object. Above all it is simplicity and adaptability. The secondary data that are assembled from the annual reports of ANMFI for the consecutive. Six years used mainly to analyze the financial perspective indicator and some aspects of nonfinancial indicators. The mean value of each indicators of performance drawn from annual report were converted in to five-point Likert scale based on the benchmark in order to make the measurement of financial and non-financial perspective similar. Primary data collected with respect to non-financial performance indicators measured by five-point Likert scale items questioners distributed to employees and clients were checked for completeness and entered into SPSS (Statistical Package for the Social Sciences) version 21software. The score of non-financial performance indicators to be used in descriptive model of the study were calculated. Then the comprehensive performance of Nigerian MFIs

was done by combining both financial and non-financial performance indicators. The results of the analysis are interpreted and discussed on the basis of literature review and theories. At the time of computing the overall score fractions approximate to the highest and lowest side based on basic mathematical assumption above .5 approximate to the highest and below.5 approximate to the lowest.

3.0.1 Descriptive Model of Financial Perspective

$$F (FP) = \alpha_1 AROA + \alpha_2 AROE + \alpha_3 OSS + \alpha_4 PaR + \alpha_5 ROEL \dots \dots \dots \epsilon_1$$

3.0.2 Descriptive Model of Non-Financial Perspectives

$$F (CP) = W*PCNC + W*PWB + W*PCVS + W*CS + W*CSO \dots \dots \dots \epsilon_2$$

$$F (IBP) = W*BPLO + W*CIS + W*DLAP + W*R\&D + W*RE \dots \dots \dots \epsilon_3$$

$$F (LG) = W*ES + W*ET + W*PF + W*IIS + W*I \dots \dots \dots \epsilon_4$$

$$F (NFP) = \beta_1 f (CP) + \beta_2 f (IBP) + \beta_3 f (LGP) \dots \dots \dots \epsilon_5$$

$$PI = WFPf (FP) + WNFPf (NFP) \dots \dots \dots \epsilon_6$$

4.0 RESULT AND DISCUSSION

4.1 Introduction

This section of research presents the process of evaluating Nigerian North-Eastern States MFIs performance. Furthermore, the research presents the result of data analysis, interpretation and discussions.

4.2 Descriptive Statistics

The role of statistics in research is to task as a tool in designing research, analyzing its data and drawing conclusions there from. Descriptive

statistics concern the development of certain catalogues from the raw data (Kothari 2004). In this research since the developed model is descriptive in its nature the detail of each model and computation is stated below.

4.2.1 Financial Perspective (FP)

The financial perspective of MFIs performance analyzed using data from 8 MFIs covering a 6 years period, which made 48 observations. 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 CBN. Then the mean score of each financial performance indicators used in the descriptive statistical model designed to calculate an overall financial performance. The SPSS output for descriptive statics of financial performance indicators are summarized on table 2 below.

Table 1: Descriptive Statistics for Financial Perspective

	N	Minimum	Maximum	Mean	Std. Deviation
AROE	7	1.475	5.310	4.031667	1.34109
AROA	7	1.327	3.985	2.974583	.98909
PAR	7	3.687	4.867	4.425000	.44738
OSS	7	3.257	5.015	4.449583	.61469
ROEL	7	4.867	5.900	5.629583	.377978
Valid N	7				

Source: Computed based on data from annual reports of ANMFIs (2025)

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

Descriptive model F(FP) = AROE + AROA + PaR + OSS + ROELP

Exploring the Effect of Balanced Scorecard Implementation on the Performance of Selected Micro-Finance Institutions in Nigeria: A Study of North Eastern Geopolitical Zone.

$$= 13(2.97) + 17(4.04) + 21(4.45) + 32(4.42) + 17(5.63)$$

$$= 0.3861 + 0.6868 + 0.9345 + 1.4144 + 0.9571$$

$$= 4.3789$$

4.3 Data Reliability Test

In observation of the information that the bases of the data or the respondents are dissimilar in number and group, the researcher tests the reliability of the data two times. First for the nine NFP variables which have 24 questions and 130 respondents and then for one NFP variable which have 10 questions and addresses the customer satisfaction with 75 respondents. In both case the Cronbach's Alpha indicates satisfactory result even if the first test is better than the second one, as can be seen below.

Table 2: Case Processing Summary of Non-Financial Perspectives (NFP)

	N	%
Valid Case	130	100
Excluded	0	0
Total	130	100

Computed based on questionnaire survey (2025)

Table 3: Reliability Statistics

Cronbach's Alpha	No. of Items
1080	24

Computed based on q questionnaire survey (2025)

Table 4: Case Processing Summary of CS

	N	%
Valid Case	75	100
Excluded	0	0
Total	75	100

Computed based on questionnaire survey (2025)

Table 5: Reliability Statistics

Cronbach's Alpha	No. of Items
837	10

Computed based on questionnaire survey (2025)

A Cronbach's Alpha approximations the proportion of variance in the test scores that can be related to true score variance (Brown 2002). From table 7 above, Cronbach's alpha value of 1.080 indicates 91.5% reliability of data collected from randomly selected staffs of MFIs. Similarly, table 9 present a Cronbach's Alpha of 0.837 which shows 70.9% data reliability of customer fulfillment survey. The following sub-sections present the results on NFP score from the analysis of the descriptive statistics using both primary and secondary data.

under CP.

Table 6: Descriptive Statistics for Customer Perspective (CP)

	N	Minimum	Maximum	Mean	Std Deviation
PCNC	7	3.245	4.5784	3.8842	.45378
PWB	7	4.75	5.015	4.8675	.13192
CSO	130	2.749	5.9	4.9835	.46709
CS	75	0.378	5.9	5.1439	.47318
PCVS	7	2.95	5.31	3.6875	.90446
Valid N	7				

Source: Computation based on data from annual reports of ANMFI & Questionnaire survey (2025)

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

$$= 28(3.39) + 19(4.87) + 15(4.96) + 15(3.69) + 23(5.19)$$

$$= 0.9492 + 0.9253 + 0.7440 + 0.5535 + 1.1937$$

$$= 4.3657$$

The result of CP computed by substituting the mean score of each performance indicators under the descriptive statistical model and it shows 4.37. Based on Likert five scale accepted for this study this result failed under the high performance category. Looking at the average involvement of particular customer perspective performance indicators, PCNC is the first with a score of 3.9, indicating that the performance of North-Eastern States MFIs measured by breadth of outreach is more than average and encouraging since it is approaching to the high performance class.

4.3.4 Customer Perspective

Under the non-financial performance, customer perspective is the first and in this research the researcher try to look at it from PCNB, which can shows the breadth of outreach, PWB as an indication of depth of outreach, CSO as an indication of social objectives, PCVS and CS as an indication of efficiency through customer satisfaction respectively. The following table summarized results of descriptive statistics computed for each of the performance indicators

However, the percentage of women borrowers (PWB) is 4.87, showing high performance on depth of outreach. As Abate et al. (2013) states serving more women tend to be linked with improved financial performance. Beside the contribution of this performance indicator of CP looked to be top importance, for the fact addressing enormous number of the poor who had been without access to basic financial service, including sidelined and underserved groups such as, women is at the core of the Microfinance vision.

The performance indicators Clear Social Objectives (CSO) and Customer Satisfaction CS shows a high performance score of 5.0 and 5.1 respectively. Even the score of the CSO and CS were both ceiling of the high performance category. This indicates MFIs clients are highly satisfied with the service they are getting from MFIs. Scoring high performance on CSO and CS

Exploring the Effect of Balanced Scorecard Implementation on the Performance of Selected Micro-Finance Institutions in Nigeria: A Study of North Eastern Geopolitical Zone.

are also a promising given that clear delivery of social objective facilitates integrating social objectives through daily operation and strategy. Furthermore, creating a linkage between organizational strategy and social performance indicators can also be achieved if the objectives are clearly identified.

The percentage change of voluntary saving made by clients is also a concern for the fact; it has yet crossed the average performance score. With respect to the importance of saving to envisaged results of MFIs Robinson & Graham (2011) opined that increase in voluntary saving not only benefit the client, but also the MFIs and the entire economy. It is also pointed out that the working poor already save and what is required are

Table 7: Descriptive Statistics for Internal Business Process (IBP)

	N	Minimum	Maximum	Mean	Std Deviation
CIS	130	2.7494	5.9	5.0819	0.76996
DLAP	130	1.18	5.9	4.7790	1.09178
BPLO	7	1.9234	2.36	2.2862	0.18065
RE	130	2.38	5.9	4.8380	1.04067
R&D	130	1.9706	5.9	3.9333	0.59539
Valid N	7				

Source: Computation based on data from annual reports of ANMFI & Questionnaire survey (2025)

$$\begin{aligned}
 \text{Descriptive model } F(\text{IBP}) &= W*\text{CIS} + W*\text{DLAP} + W*\text{BPLO} + W*\text{RE} + W*\text{RD} \\
 &= 27(5.07) + 16(4.47) + 23(2.29) + 10(4.84) + 24(3.89) \\
 &= 1.3689 + 0.7152 + 0.5267 + 0.4840 + 0.9336 \\
 &= 4.0284
 \end{aligned}$$

The result with respect to IBP of the sample institutions planned using the descriptive statistical model is 4.03. This is under high performance score category of the five scale Likert adopted in this research. The average result of each IBP performance indicators demonstrates different performance levels. The average score of BPLO is 2.29 which is under low performance category and the result suggested that, low staff productivity among the studied MFIs in terms of serving borrowers. Other IBP indicators, namely:

institutions and services suitable to their needs. Thus, Ethiopian MFIs are supposed to devise ways to improve both breadth of outreach and amount of voluntary saving, which both are important for clients, MFIs and the economy as a whole.

4.3.5 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 CIS, DLAP, BPLO, RE, and R&D are included as performance indicators. The descriptive statistics result of this perspective is shown in table 11 below:

CIS, DLAP, RE recorded encouraging result. As can be seen from the table above CIS, DLAP, RE had an average score of 5.08, 4.78, and 4.84 respectively. This indicates that MFIs under the study performed highly in developing better business process through taking into account a clear institutional strategy, and speedy loan application process, which potentially improve customer perspective through its measured performance indicators. High performance on RE also shows the good messaging culture of the studied MFIs. The result of research and development is 3.93 it means under the above average performance category and it implies Nigerian MFIs in North-Eastern Region needs to give emphasis with regard to this indicator.

4.3.6 Learning and Growth

Exploring the Effect of Balanced Scorecard Implementation on the Performance of Selected Micro-Finance Institutions in Nigeria: A Study of North Eastern Geopolitical Zone.

Under this perspective the included performance indicators include are: - employee training (ET), investment on information system (IIS), employee satisfaction (ES), innovation (I) and performance

feedback (PF). The results of the descriptive statics on LG perspective, along with performance indicators are presented below.

Table 8: Descriptive Statistics for Learning and Growth (LG)

	N	Minimum	Maximum	Mean	Std Deviation
ET	130	1.18	5.9	3.7996	1.31614
IIS	130	1.5694	5.9	4.2598	1.18734
ES	130	1.18	5.9	4.0710	1.12284
I	130	1.18	5.9	4.1811	1.11556
PF	130	1.18	5.9	4.1193	1.33526
Valid N	130				

Source: Computation based on data from annual reports of ANMFI & Questionnaire survey (2025)

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

$$= 17(3.80) + 33(4.26) + 20(4.07) + 18(4.18) + 12(4.12)$$

$$= 0.6460 + 1.4058 + 0.8140 + 0.7524 + 0.4944$$

$$= 4.1126$$

The overall performance score of LG perspective from the descriptive statistical model is 4.11, which is the more than ceiling of average score. With the exception of investments in information system and innovation which are under high performance category even if it is the floor, all other performance indicators of LG perspective are under higher performance score. This indicates that there is no questionable performance with respect to LG unlike the other perspective and it requires earnest reflection for the fact it could directly not attributed for low performance measures in IBP, which implicate with measures of CP and next measures of FP.

4.4 Overall Non-Financial Performances Perspective

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

$$\text{Descriptive model } F(\text{NFP}) = \beta(\text{CP}) + \beta(\text{IBP}) + \beta(\text{LGP})$$

$$= 38.1\% (4.3903) + 35.7\% (4.6734) + 26.2\% (4.2126)$$

$$= 1.6727 + 1.6684 + 1.1037$$

$$= 4.4448$$

Based on the computation, the overall non-financial performance score is 4.4448, which shows a high performance level of attaining non-financial objectives. Though, the result clearly revealed that the performance indicators shows a high performance, which discloses latent attention for attractive non-financial performance, specifically for all performance indicators.

4.4.1 Overall Performance

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

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

$$= 58\% (4.3542) + 42\% (4.4486)$$

$$= 2.5254 + 1.8684$$

= 4.3938

As demonstrated from all analysis the results of MFIs in Nigeria were highly performing as shown by all 20 performance indicators scores high performances. This means the entire performance can be furthered by enhancing indicators identified with low and average score under each of the four perspectives.

The other sticking observation is the balance between overall non-financial and financial performance. This finding confirmed previous studies that concluded there were a trade-off balance between outreach and sustainability in Nigerian MF industry as opined by (Befekadu, 2007). The empirical evidence on the trade-off balance between outreach and sustainability is perfect, hence, the finding in this respect is not in contradiction with Letenah (2009) who found a trade off balance between outreach and operational self-sustainability.

4.4.2 Relationship Between the MFIS Performance Perspectives

As pointed out in chapter three, the hypotheses framed in this research expected performance indicators of MFIs which are considered under the four perspectives of the BSC model revealed a positive relationship to each other. This means excellence in one perspective will have a positive effect on the other/s, which ultimately enable better attainment of the broad strategic objective. Among the measures of relationship Karl Pearson's coefficient of correlation is the commonly used measure in case of statistics of variables measured at ration and interval scales (Kothari 2004). Thus, Pearson Correlation is employed to examine whether the postulated relationship between the variables actually be present or not.

The Pearson correlation coefficient "r" measures the relationship between variables and shows both the direction and strength of relationship. One importance of correlation is information on the degrees/strength of the relation between variables.

In general the higher the correlation coefficient means the stronger the relationship. A positive coefficient of r shows a direct relationship; whereas negative value of r indicates an inverse or indirect relationship. The strength of the relationship is also determined by the value of coefficient (r). According to Dancey and Reidy's (2004) when 0 and 1 is a value of the Correlation Coefficient, it represents the existence of no relationship and perfect relationship respectively. The value between 0 and 1 are categorized as follows: r between 0.7 - 0.9 indicates strong; r between 0.4 - 0.6 indicates a moderate; and r in between 0.1 - 0.3 means a weak relationship.

The hypotheses stated about the relationships between the four performance perspectives based on their cause and effect relationship chain tested in the research are presented here under. First the relationship between LG and IBP tested, followed by IBP and CP, then CP and FP, and finally the relationship between overall FP and NFP tested.

The hypotheses stated about the relationships between the four performance perspectives based on their cause and effect relationship chain tested in the study are presented here under. First the relationship between LG and IBP tested, followed by IBP and CP, then CP and FP, and finally the association between overall FP and NFP tested.

H1: There is positive correlation between learning and growth and internal business process.

Table 9: Correlation between Learning and Growth (LG) and Internal Business Process (IBP)

**Correlation is Significant at 0.01 level (2 Tailed)

	NFPLG	NFPIBP
Pearson Correlation	1	0.577**
NFPLG Sig. (2 Tailed)		0.000
N	130	130
Pearson Correlation	0.577**	1
NFPIBP	0.000	
N	130	130

Source: Computed based on data from annual reports of ANMFIs & questionnaire survey (2025)

Statement of the outcome on table 13 revealed that learning and growth shows a statistically significant ($P=0.01$) moderate positive correlation ($r = 0.577$) with internal business process. The direction of relationship is in line with the theoretical assumption of BSC literature that states the learning and growth perspective performance indicators of each organization is the driver of the internal business process perspective (Tarigan and Wedjaja 2012). Hence, H1 is accepted. This could recommend improving performance from LG perspective in MFIs could have positive implication on IBP performance as expressed theoretically.

H2: There is positive correlation between internal business process and customer perspective.

The chain of affiliation in BSC link IBP to CP. The internal business process in the framework of MFIs is intended to include performance indicators showing efficiency and effectiveness of the business process which is believed to affect customer satisfaction, which strengthens better service and benefit of target clients, which in turn drive the double bottom line. The correlation statistics with respect to IBP and CP is presented on table 14.

Table 10: Correlation between Internal Business Process (IBP) and Customer Perspective (CP)

****Correlation is Significant at 0.01 level (2 Tailed)**

	IBP	CP
Pearson Correlation	1	0.500
PIBP Sig. (2 Tailed)		0.000
N	130	130
Pearson Correlation	0.500	1
CP Sig. (2 Tailed)	0.000	
N	130	130

Source: Computed based on data from annual reports of ANMFIs & questionnaire survey (2025).

The outcome on table 14 is also shows a reasonably positive correlation ($r = 0.500$) between IBP and CP. The correlation is also statistically significant at 0.01 level on a 2-tailed test. The outcome is dependable with the general theory of BSC. Consequently, it is safe to accept the H2 hypothesis.

H3: There is positive correlation between customer perspective and financial perspective.

Deprived of considering institutional or organizational differences in general literatures on BSC expected that a better value proposal which satisfy customer drives financial performance. In this research it was hypothesized the same will also holds true in MFIs though the customer perspective incorporates social performance processes which deliberated by some as having negative effect on financial performance. The issue of balancing social and profitability objective in MFIs is desirable, but empirical evidence to date is mixed. The correlation from this research is as follows: -

Table 11: Correlation between Customer Perspective (CP) and Financial Perspective (FP)

****Correlation is Significant at 0.01 level (2 Tailed)**

	NFPCP	FP
Pearson Correlation	1	0.832
NFPCP Sig. (2 Tailed)		0.000
N	130	130
Pearson Correlation	0.832	1
FP Sig. (2 Tailed)	0.000	
N	130	130

Source: Computed based on data from annual reports of ANMFIs & questionnaire survey (2025).

The correlation between CP and FP in North-Eastern States geopolitical Zone of Nigerian MFIs shown on table 15, above is positive and strong, as well as significant. This recommends an insight that better value plan, even with the inclusion of socially desirable products and services which had been considered costlier in the conventional

financial sector is positively related with financial performance. The relation hypothesized on the basis of general BSC theory is dependable in MFIs as well. Hence, H3 is accepted.

H4: There is positive correlation between financial performance (FP) and non-financial performance (NFP).

Table 12: Correlation between Financial Perspective (FP) and Non-Financial Perspective (NFP)

**Correlation is Significant at 0.01 level (2 Tailed)

	FP	NFP
Pearson Correlation	1	0.674
FP Sig. (2 Tailed)		0.000
N	130	130
Pearson Correlation	0.674	1
NFP Sig. (2 Tailed)	0.000	
N	130	130

Source: Computed based on data from annual reports of ANMFIs & questionnaire survey (2025)

BSC assumed that favorable performance results on non-financial performances would have positive implication on financial performance. The Pearson r value of 0.674 indicates a reasonable positive correlation between this two perspectives. In other clarification if the financial performance of MFIs has appreciated, the non-financial perspective also has the identical pattern and vice versa. This result of the financial and non-financial performance relation is as expected by the researcher and also similar with previously research (Kipsha 2013b).

Confidence that specific relationship exists between the variables being analyzed is redirected by the probability (p) value associated with the correlation and If p is small (predictably, $p < .05$), then it can be said at least 95% confident that certain relationship exists in the researched variables. Likewise if $p < 01$ then it can be said at least 99% confident that some relationship exists in the researched variables. So in the correlation analysis above the p value of all the four

correlations is .000 which means at least 99% confident that relationship exists in the studied variables. In other words the correlation is significant at 1% level of confidence so, all the null hypotheses are rejected and the alternatives are stay this means there is statistically significant positive relationship between LG and IBP, IBP and CP, CP and FP and finally between FP and NFP.

In summary in this chapter, a balanced scorecard approach performance evaluation framework developed in this research applied to sample MFIs and show the performance of Nigerian MFIs from the four perspective of BSC. Then the applicability of BSC to Nigerian MFIs is tested through the hypothesized relationship of the BSC perspectives.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The research explored the application of BSC approaches as a performance evaluation tool for Nigerian MFIs in a way that performance indicators are viewed in light of their influence to the achievement of the broad strategy of an MFI, which merges both social and financial objectives and this research established the use of balanced scorecard has high prospective in showing a comprehensive performance of MFIs.

The research first reviewed literature on micro-finance performance and BSC approach from strategic management accounting in order to develop a theoretical framework. A total of 20 key performance indicators /variables are equally classified under financial perspective, customer perspective, internal business process perspective, and learning and growth perspective, in the developed BSC model for this research. The overall inference on micro-finance performance dimensions supposed to relates micro-finance operation and strategy.

The BSC approach applied in this research is different from previous performance evaluation

Exploring the Effect of Balanced Scorecard Implementation on the Performance of Selected Micro-Finance Institutions in Nigeria: A Study of North Eastern Geopolitical Zone.

studies in Nigeria specifically on MFIs. Given that this study consumed multiple data sources and types and also adopted descriptive statistical model that enabled to aggregate results of performance indicators of both financial and non-financial. The findings of the study presented in the forgoing discussions leads to the following conclusions.

The first part, weight allocation to performance perspectives shows higher overall weight given to financial performance than non-financial performances. This show the experts are in view of the need of more concentration on profitability and sustainability. The lower weight to non-financial perspectives that includes performance indicators related to social objectives, and other non-financial perspectives could also suggest limited awareness on using integrated strategic performance management system like BSC.

The second section of the data analysis presents the descriptive statistics on each performance perspectives and indicators. It is concluded from the result with the exception of Learning and growth perspective which fails under average performance category the rest BSC perspectives fails under high performance category of the used Likert scale even if it didn't mean all the indicators are at the same level of performance. Beside no BSC perspective fails under very high performance category of this study.

From the analysis of each performance indicators it is observed BPLO from internal business process, and AROE from financial perspective have the lowest score as compared to others. Overall score of the three non-financial perspectives also found under the high performance category. Nevertheless, such a high performance contains serious requirements of improvement on some variables/indicators, for the fact there are variability among various indicators.

Relatively similar result obtained on financial perspective and non-financial perspective, which both are found under the range of high performance. This suggested that the institutions

under study have managed to strike a balance between outreach and sustainability against the contention on literature that the two are conflicting.

The analysis of association among different performance perspectives confirmed the overall assumption of BSC with regard to relationship among the four BSC perspectives. For the fact statistically significant moderate correlation existed between LG and IBP, IBP and CP and overall FP and NFP. And also CP and FP have statistically significant strong correlation. The positive relationship between overall FP and overall NFP presents an important implication for literature, in which the debate between sustainability and outreach in MFIs remained unsolved.

Though further and comprehensive empirical work is demanding for the fact this study is exploratory and a few previous empirical works existed to compare the finding of the current study, the result suggested the application of BSC in MFIs enabled to have a comprehensive view of performances along with the relationship between each performance perspectives.

5.2 Recommendations

Based on the analysis, interpretation of results and the findings the following recommendations were developed:

- I. BSC is accomplished of giving comprehensive or all-inclusive picture of performances of MFIs. Therefore, the government (through the regulatory organ e.g. CBN) should introduce a system that will facilitate MFIs operating not only in North-Eastern States Region but in the country as a whole to use different measurements of BSC performance indicators together with financial performance processes.
- II. The Central Bank of Nigeria (CBN) and Association of Nigerian MFIs (ANMFIs) should support and build the capacity of

Exploring the Effect of Balanced Scorecard Implementation on the Performance of Selected Micro-Finance Institutions in Nigeria: A Study of North Eastern Geopolitical Zone.

MFIs towards using BSC in measuring their performance, for example through revising their performance reporting content.

- III. The use of BSC will give the accountants and management of any organization not only MFIs 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.
- IV. Based on the developed and applied BSC framework, the analysis of each performance perspective are discussed in chapter four and rooted in the highlighted performance scores of each perspective the following recommendations are forwarded.

It appears from the research, learning and growth perspective of North-Eastern States MFIs needs to be a prime focus, for its positive relationship with internal business process improvement and customer perspective, which the basic objective of the sector. The LG perspective indicators are demanding enormous management attention since; LG is the starting point of performance based on BSC. So, North-Eastern States MFIs expected to improve the LG perspective performance through proposing interesting benefit, motivating employees using consistent and value adding training which can empower them with appropriate performance feedback and reward. And also creating modern (computerized, networked) and innovative work environment could improve the LG perspective.

References

Abate G. T., Borzaga C., and Getnet K. 2013, „Financial sustainability and outreach of microfinance institutions in Ethiopia:

does organizational form matter?“ Euricse Working Paper, no. 56.

Abbas Kheder Ahmed Mustafa & Maisarah Mohamed Saat 2013, „Microfinance Institutions Performance Measurement: Introducing a New Performance Measurement Framework“, Middle-East Journal of Scientific Research, vol.15 no.11, pp. 1618- 1628.

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.

Al-Najjar Sabah M. 2012, „Designing a Balanced Scorecard to Measure a Bank's Performance: A Case Study“, International Journal of Business Administration, Vol. 3, No. 4.

Anthony, R.J and Govindarajan V. 2007, „Management Control Systems“, New York.

Arega Seyoum 2007, „Assessment of the Financial and Operating Performance and Challenges of MFIs in Addis Ababa“, Msc thesis, Addis Ababa University.

Armendariz de Aghion, Beatriz and Morduch, Jonathan 2005, „The economics of microfinance“, Cambridge, MA: MIT Press. Atikus investments incorporated Microfinance status report 2014, New York University.

Bayeh Asnakew Kinde 2012 , „Financial Sustainability of Microfinance Institutions (MFIs) in Ethiopia“, European Journal of Business and Management , Vol 4, No.15, pp. 001- 010.

Exploring the Effect of Balanced Scorecard Implementation on the Performance of Selected Micro-Finance Institutions in Nigeria: A Study of North Eastern Geopolitical Zone.

- 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“, New York Conference Board Report, New York.
- Brown J. D. 2002, „The Cronbach alpha reliability estimate“, University of Hawai'i at Manoa, JALT Testing & Evaluation, SIG Newsletter.
- 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.
- C. Van Rooyen, R. Stewart, & T. De Wet 2012, „The Impact of Microfinance in Sub-Saharan Africa: A Systematic Review of the Evidence“, World Development, Vol. 40, No. 11, pp. 2249 – 2262.
- Christian E. 2014, „microfinance market outlook“ ResponsAbility investments AG, Zurich, Switzerland.
- Churchill C. and Frankiewicz Cheryl 2006, „Making microfinance work: managing for improved performance“, International Labor Organization, Geneva.
- Consultative Group to Assist the Poor 1997, „Introducing Savings in Microcredit Institutions“, no. 8.
- Cooper & Pamela S.Schindler 2006, Business research methods, 9th edn, McGraw-Hill/Irwin, New York.
- Creswell 2003, Research design qualitative, quantitative, and mixed methods approaches, 2 ndedn., Thousand Oaks, CA: SAGE.
- Dancey CP, Rediy 2004, „statistics without maths for psychology using SPSS for windows“, 3 rdedn., Pearson prentice hall, London.
- Balanced score card institute (BSCI) 2002, „The Balanced Scorecard and Knowledge Management“.
- Bamlaku Alamirew Alemu 2006, „Micro financing and Poverty Reduction in Ethiopia“, Paper prepared under the Internship Program of IDRC, ESARO, Nairobi.
- David Peck 2010, „performance analysis report“, bulletin 6, Association of Ethiopian microfinance institutions (AEMFI), Addis Ababa.
- David Peck and Ephrem W/Yohannes 2009, „performance analysis report“, bulletin 5, Association of Ethiopian microfinance institutions (AEMFI), Addis Ababa.
- 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, No. 1.
- Ebisa Deribie, Getachew Nigussie and Fikadu Mitiku 2013, “filling the breach: Microfinance“ Journal of Business and Economic Management, vol.1, no.1, pp. 010-017.
- Esubalew Assefa, Niels Hermes & Aljar Meesters 2010, „Competition and Performance of Microfinance Institutions“. Federal democratic republic of Ethiopia 1996, „Licensing and supervision of the business of micro-financing institutions“, proclamation no., 40/1996 Addis Ababa Negarit Gazeta, 2 ndyear no. 30.
- Federal democratic republic of Ethiopia 2009, „Micro-financing business“ proclamation no. 626/2009 Addis Ababa Negarit Gazeta , 15th year no.33.

- Gashaw T. Ayele 2014, „Microfinance Institutions In Ethiopia, Kenya, And Uganda: Loan Outreach To The Poor And The Quest For Financial Viability“, The Horn Economic And Social Policy Institute(HESPI), Policy Paper No. 02/14.
- Getachew Tekaand& Yishak Mengesha 2006, „Integrating Financial Services into the Poverty Reduction Strategy: The Case of Ethiopia“, Paper presented at the East Africa Subregional Workshop, Integrating Financial Services into Poverty Reduction Strategies, June 28-30, Dar es Salaam, Tanzania.
- Guntz S. 2011, „Sustainability and profitability of microfinance institutions“, Msc thesis, Georg Simon Ohm University of applied sciences, Nuremberg.
- Hazeltine, B. and Bull, C. 2003, „Field guide to appropriate technology“, Academic Press.
- Hermes, N., Lensink, R., & Meesters A. 2011, „Outreach and efficiency of microfinance institutions“, World Development.
- 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.
- Jansson, Damin Von Stauffenberg, Naomia Kenyon, Maria Cruz Barluenga Badiola 2003, ‘performance indicators for microfinance institutions: Technical Guide’, 3rd edn., Micro rate and inter-American development bank sustainable development department, micro small and medium enterprise division, Washington D.C.
- Kaplan, R. S., & Norton, D. P. 2004, „Measuring the strategic readiness of intangible assets“ Harvard Business Review, Boston. 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, and 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, and 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, and Boston.
- Kipsha E.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.
- Kipsha 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.
- Kipsha E.F. 2013, „Performance of Microfinance Institutions in Tanzania: Integrating Financial and Non-financial Metrics“, European Journal of Business and Management, Vol.5, No.4, pp. 094-105.
- Knapp 2001, „The Balanced Scorecard: Historical Development and Context, As Developed by Robert

Exploring the Effect of Balanced Scorecard Implementation on the Performance of Selected Micro-Finance Institutions in Nigeria: A Study of North Eastern Geopolitical Zone.

- Kaplan & David Norton, "Foundations of Management", Anderson University.
- Kothari C.R. 2004, Research methodology methods and techniques, New age international, New Delhi. Lafourcade, Jennifer Isern, Patricia.
- Malgwi A. & Dahiru H. 2014, „Balanced Scorecard financial measurement of organizational performance: A review“, Journal of Economics and Finance, vol.4 no.6, pp.001-010.
- Mwangi, and Matthew Brown 2005 „Overview of the Outreach and Financial Performance of Microfinance Institutions in Africa“, Mix market.
- Ledgerwood 1998, Microfinance Handbook: sustainable banking with the poor, The World Bank, Washington D.C.
- Ledgerwood 1999, 'sustainable banking with the poor', microfinance hand book an institutional and financial perspective, The World Bank, Washington D.C, U.S.A.
- Ledgerwood and Victoria White 2006, „Transforming Microfinance Institutions: Providing Full Financial Services to the Poor“, The world bank, Washington, D.C.
- Letenah Ejigu 2009, „Performance Analysis of a sample Microfinance Institutions of Ethiopia“ PhD thesis, Panjab University, Chandigarh.
- Lovy.O. I. Atarere & O. Valentine Oroka (2009), „Roles of Balance Score Card in Improving the Performance of Microfinance Banks in Nigerian Economy“, International Journal of Research Development, pp.280-289.
- Malmi T. 2001, „towards explaining activity based costing failure: accounting and control in a decentralized organization“, Management Accounting Research, vol.8, no.4, pp. 459- 480.
- Marguerite Robinson & Graham A.N 2001, „Mobilizing Savings“, Micro save briefing note no.3.
- Mertens D. M. 1998, Research methods in educations and psychology: integrating diversity with qualitative and quantitative approaches, Thousand Oaks, CA: Sage.
- Montgomery Dan & Perry Gail S. 2000, „Build Innovation into Your Strategy“, Balanced Scorecard Institute.
- Morduch 1999, „The microfinance promise“, Journal of Economic Literature, vol. XXXVII, pp.1569-1614. Moss Vuyisani (nd) , „Report on the Performance of Microfinance Institutions (MFIs) for the Period Under Review“. Mulunga A. M. 2010, „Factors Affecting the Growth of Microfinance Institutions in Namibia“, MSc thesis, University of Stellenbosch.
- 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 Microfinancing Institutions Using the Balanced Scorecard Approach“, International Journal of Business and Information, vol. 7, no. 2, pp.165-204.
- Needles & Powers Marian 2007, Financial accounting, 9thedn. Houghton, Boston New York.
- 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. 1
- Panicker Sunita and Vinita Seshadri 2013, „Devising a Balanced Scorecard to determine Standard Chartered Bank's

Exploring the Effect of Balanced Scorecard Implementation on the Performance of Selected Micro-Finance Institutions in Nigeria: A Study of North Eastern Geopolitical Zone.

- Performance: A Case Study“, International Journal of Business Research and Development, Vol. 2, No. 2, pp. 35-42.
- Perlman Yael 2013, „Causal Relationships in the Balanced Scorecard: A Path Analysis Approach“, Journal of Management and Strategy, vol.4, no.1, pp. 70-79.
- Philips, D. 1990, „Post-positivistic science myths and realities: The Paradigm Dialog“, New York: Newbury Park, Sage Press.
- Procurement Executives“ Association (PEA) nd, „moving from Performance Measurement to Performance Management: Guide to a Balanced Scorecard Performance Management Methodology.
- Rahel Hurissa 2011, „Achievements and challenges of microfinance institution in Ethiopia the case of Addis Ababa“ bachelor thesis, Jank university of applied sciences.
- Richard Rosenberg 2009, „Measuring Results of Microfinance Institutions Minimum Indicators That Donors and Investors Should Track,“ a Technical Guide, CGAP, The World Bank.
- Rick Yount 2006, The Meaning of Correlation, Correlation and Data Types Pearson's r Spearman rho Other Coefficients of Note Coefficient of Determination r², 4th edn.
- Robinson M. 2001, „The Microfinance Revolution; Sustainable Finance for the Poor“, Vol.1 Washington D.C, The World Bank.
- Sa-Dhan microfinance manager series 2006, „How to use the Loan Loss Ratio in Microfinance?“, technical note, no. 4.
- Sa-Dhan microfinance manager series 2006, „What is Return on Equity? How to use it in Microfinance?“, technical note, no. 19.
- Sebstad J. 2003, „country strategy 2003–2007 Short Study on Microfinance; Ethiopia“, Department for Africa, Sida.
- Seven Modell 2012, „The politics of balanced scorecard“, Journal of Accounting and Organizational Change, vol.8, no.4 pp. 475-489.
- Simon Zekarias 2013, „Multi-Dimensional Performance Measurement Via Balanced Scorecard In Commercial Banks Of Ethiopia“, Radix International Journal Of Economics & Business Management, Vol. 2, no.1, pp.001-018.
- Tarigan D. J. and Widjaja D. C. 2012, „The Relationship between Non- Financial Performance and Financial Performance Using Balanced Scorecard Framework“, International Journal of Innovation, Management and Technology, Vol. 3, No. 5, pp.614-618.
- Tuomele T.S 2005, „the interplay of different levers of control: A case study of introducing a new performance measurement system“, Management Accounting Research, vol.16, pp., 230-293.
- Wolday Amha 2012, „the development of deposit taking microfinance institutions in Ethiopia: performance, growth challenges and the way forward“, occasional no. 32, AEMFI.
- Wolday Amha and Anteneh Kifle 2011, „performance analysis report“, bulletin Association of Ethiopian microfinance institutions (AEMFI), Addis Ababa.
- Wolday Amha and Anteneh Kifle 2012, „performance analysis report“, bulletin Association of Ethiopian microfinance institutions (AEMFI), Addis Ababa.
- Wolday Amha and Anteneh Kifle 2013, „performance analysis report“, bulletin

Association of Ethiopian microfinance institutions (AEMFI), Addis Ababa.

Wolday Amha and Anteneh Kifle 2014, „performance analysis report“, bulletin 1 Association of Ethiopian microfinance institutions (AEMFI), Addis Ababa.

Yitay Elema 2011, „Assessment of institutional performance and sustainability of selected microfinance institutions: a data envelopment analysis approach“, Msc. thesis, Addis Ababa University.