

The effect of corporate governance on financial performance of microfinance institutions in Ethiopia

Ayneshet Agegneu (Ph.D. scholar & Asst.Prof), Co-Author Dr. Tripti Gujral

Parul University, Faculty of commerce Department of Accounting and Finance

Corresponding Author and Email: **Ayneshet Agegneu** , yonasaynesht@gmail.com

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Abstract

The article is aimed to identify the impact of corporate governance on the financial performance of MFIs in Ethiopia. To this end, the researcher employed a quantitative research approach with an explanatory research design. The secondary data were collected from 30 MFIs audited financial statements from 2016 to 2020 G.C. The research employed a random effect regression analysis model to identify the effect of ten explanatory variables on financial performance measured through return on asset. The result of this study indicated that board diversity, board education, capital adequacy, and leverage have a positive and statistically significant impact on the financial performance of MFIs. On other hand, the board size, liquidity, non-performing loan, and inflation have a negative and statistically significant impact on ROA. But the size of the audit committee does not affect the financial performance of microfinance institutions operating in Ethiopia.

Keywords: 1. Corporate Governance, 2. Impact, 3. Microfinance institution, 4. Financial Performance

1. Introduction

In microfinance institutions, corporate governance has been defined as how MFIs' systems, procedures, processes, and practices were managed. It is a mechanism used to minimize the conflict of interest between management and shareholders. Since the bank sector is the most important in any economy, it is critical for economic growth and development; hence, there is a need for its strict regulation all over the world (Al-Amarneh, 2014). Good corporate governance will result in increasing the value of the firm and its performance (Al-Homaidi et al., 2019). To this end, Love (2012) suggested that corporate governance may have an impact on several different aspects of a firm like operating performance, market value, and stock returns.

In most of most developing countries like Ethiopia, the subjects of corporate governance in financial institutions have become burning issues in the banking industry due to fact that they affect the financial performance of microfinance institutions in the world. Since the sustainability of the microfinance institutions sector is the most important sector in any economy, it is critical for studying the impact of corporate governance on financial performance.

Corporate governance of microfinance institutions is the most recent and youngest discipline that affects financial performance and philosophy in microfinance institutions (Shegaw, 2019). In prior studies, the nature of corporate governance practiced by MFIs is less understood and no substantive work using multiple MFI outcomes over several years has been undertaken. The concerns raised in reviews of individual MFIs and normative discussions of what should constitute best practice do point to the need for a better understanding of the nature of corporate governance practiced by the MFIs and also, to understand the nature of the relationship that exists between institutional success and corporate governance especially for developing countries. This study therefore identifies and provides a framework for undertaking corporate governance research relating to MFIs.

Even though many studies have been conducted to identify the relationship between corporate governance practices and firm performance in different sectors, there are limited studies conducted in the microfinance sector and the empirical analysis of good corporate governance practices about MFIs is still at an immature stage and this justifies a need to conduct more studies in this field to enhance MFIs' development.

The empirical studies of researchers like Dinberu (2017); Muluneh et al., (2018); Dembel (2019); Shegaw (2019); Bayu&Hunde(2020); García-Pérez et al., (2020); and, Okoye et al., (2021) were found out that there revealed that board size, board educational qualification, board diversity, board independence, the experience of board members, and size of MFIs have a positive and significant relationship with financial performance.

Hence, the aforementioned studies failed to disclose the literature and methodology gap by incorporating those small-sized MFIs in their samples. The maximum numbers of MFIs incorporated in their studies were 10. But this study will improve the sample size by up to 200 observations by considering 20 MFIs that have at least 10 years of audited financial statements. So, the researcher aimed to identify the effect of corporate governance indicators such as using board size, board independence, board diversity, size of audit committee, educational qualification of the board members, board members experience, Age, Size of MFIs, capital adequacy, and leverage ratio as explanatory variables on profitability of selected MFIs from 2010 up to 2020 G.C for the necessity of policy guidance on the effect of each specific variable on the profitability of the microfinance institutions in Ethiopia. On another hand from the researcher's level of knowledge, there is limited research on similar topics in Ethiopia and it will contribute to the existing stage of the study of corporate governance and its effect on the financial performance of MFIs in Ethiopia. Therefore, filling the aforementioned gaps is the aim of this research.

The findings and recommendations of the current study would serve as an ingredient and be informative in identifying corporate governance in financial performance in Ethiopia in general. It will provide valuable information for the policymakers about corporate governance implementation and findings will be used in policy formulation about implementing corporate governance in Microfinance organizations. The government could use the study to come up with clear criteria for promoting MFIs of Ethiopia. Researchers in the particular and the academic community, in general, could use this study as a stepping stone for further studies on MFI's CG issues. Management of the MFIs may find the study invaluable in making decisions on corporate governance issues. It will serve as reference material for anyone who will undertake a further study on the same or related topic at the national and international level.

The general objective of the study

The general objective of the study is to analyze corporate governance and its impact on the financial performance of Ethiopian Microfinance Institutions.

Specific Objectives of the study

In line with the general objective, the study will have the following specific objectives:

- a) To establish the effect of board size on the financial performance of microfinance institutions.
- b) To examine the impact of board of directors education on the financial performance of microfinance institutions.
- c) To identify the impact of board diversity on the financial performance of microfinance institutions.
- d) To examine the impact of the size of the audit committee on the financial performance of microfinance institutions.
- e) To examine the impact of the size of MFI on the financial performance of microfinance institutions.
- f) To examine the impact of capital adequacy on the financial performance of microfinance institutions.
- g) To examine the impact of leverage on the financial performance of microfinance institutions.
- h) To examine the impact of MFI age on the financial performance of microfinance institutions.
- i) To examine the impact of MFI liquidity on the financial performance of microfinance institutions.
- j) To examine the impact of the non-performing loan on the financial performance of microfinance institutions.
- k) To examine the impact of the inflation rate on the financial performance of microfinance institutions.

2. Literature Review

2.1. The concept of Microfinance

Different authors and organizations have defined Microfinance institutions in different ways. However, the concept or the meaning of the definitions is usually the same in which microfinance refers to the provision of financial services; primarily savings and credit to the poor and low-income household that don't have access to commercial bank service. Consultative Group to Assist the Poor (Christen et al., 2012) defined "microfinance" as the provision of formal financial services to poor and low-income people, as well as others who systematically not benefit from the financial system. As noted, "Microfinance" is not only providing a range of credit products (for consumption, smoothing for business purposes, to fund social obligations, for emergencies, etc.) only, but also savings, money transfers, and insurance. The other researcher defined about MFIs is that it offers financial services to poor people. The aim of Access to financial services for poor people is to help to alleviate risks, build their assets, improve their income, and contribute to the development of the focal community (Cull et al, 2009).

2.1. The concept of Corporate Governance

Generally, Governance is concerned with the processes, systems, practices, and procedures that govern institutions, how these rules and regulations are applied and followed, the relationships that these rules and regulations determine or create, and the nature of those relationships. Essentially, governance addresses the leadership role in the institutional framework (Bebchuk et al., 2009). According to Dignam & Lowry (2014) corporate Governance describes as a set of procedures, practices, policies, and laws which guide and show how the corporation is run, managed, or controlled with the main purpose to handle the organization's issues. According to David Yermack (2017), governance means administrating and monitoring the practice of pressures on providing good procedures and adherence to prearranged characteristics of standards and also state a Corporate Governance as controlling power targeted to the issue of an organization to create a good rule and implement previously determined principles. Corporate governance assures the shareholders that

they will get a return on their investment. They emphasized as corporate governance determines the agency aspect as to how shareholders motivate the managers to give their return to them. Like they pay them extra bonuses and provide different facilities just to safeguard their investment and its return.

The study of Toe (2014) suggested that corporations for better performance and enhancing growth involve the commitment from the Board of Directors to (a) embrace the importance of understanding the demands and underlying rationale of the codes; (b) have an ideal make-up of the Board to promote independence and avoid domination; (c) have boardroom processes in place for a smooth flow of communications; (d) incorporate sub-committees of the board; and (e) emphasize the importance of including stakeholder interests in boardroom decisions. Adigwe et al., (2016) corporate governance has become an issue of global significance and has received new urgency due to various corporate scandals and failures. Good and stiff corporate governance must be setup for certain companies to progress their operational performance, development of the economy and to increase the owner's reliance on their equity in the business. So that good corporate governance solves the challenges facing the firms and makes them succeed in their objective and ending with fruitful results.

2.2 Theoretical Review

The following Section reviews the theoretical perspectives of a board's accountability that is relevant for this study, drawing on agency theory, stewardship theory, stakeholder theory, and resource dependency theory as main corporate governance theories.

2.2.1 Agency Theory

The role of the governing board and the agency problem has been examined in a large body of literature and researchers examined the impact of board structure as the monitoring mechanism to mitigate the principal-agent problem which is the main focus of agency theory. Agency theory addresses disputes that arise primarily in two key areas: A difference in goals or a difference in risk aversion. Management may desire to expand a business into new markets, focusing on the prospect of short-term profitability and elevated compensation. An agent is employed by a principal to carry out a task on their behalf. Agency refers to the relationship between a principal and their agent. Agency costs are incurred by principals in monitoring agency behavior because of a lack of trust in the good faith of agents (Nuhu, & Hussani, 2017).

2.2.2 Stewardship Theory

Stewardship theory is a theory that managers, left on their own, will act as responsible stewards of the assets they control. Stewardship theorists assume that given a choice between self-serving behavior and pro-organizational behavior, a steward will place a higher value on cooperation than defection. According to stewardship theory, corporate governance is necessary to ensure that the organization is headed in 'the right direction, with this direction referring to the interests of stakeholders, (Donaldson & Preston 1995). Stewardship theory finds a strong relationship between stewards and the success or the performance of the firm and therefore the stewards protect the organization maximize the performance and try to satisfy most of the stakeholder groups in an organization.

2.2.3 Stakeholder Theory

The significance of stakeholder theory is that it recognizes that organizations are not controlled or affected purely by those that exercise ownership rights in the organization. The core idea of stakeholder theory is that organizations that manage their stakeholder relationships effectively will survive longer and perform better than organizations that don't. Freeman et al., (2004) suggest that organizations should develop certain

stakeholder competencies. According to Smallman (2004), the main criticism of stakeholder theory is focusing on identifying the problem of who constitutes genuine stakeholders. Another argument is that meeting stakeholders' interests also leads to corruption, as it offers agents the opportunity to divert the wealth away from shareholders to others.

2.2.4 Resource Dependency Theory

According to the resource dependency theory, directors bring resources such as information, skills, key constituents (suppliers, buyers, public policy decision-makers, social groups), and legitimacy that will reduce uncertainty which in turn reduces the transaction cost and the potential of linking the organization with the external networks. This provides an opportunity to gather more information and even skills in various specialties. Pfeffer (1972) confirmed this argument and explained that board size and its composition is a rational organizational response to the conditions of the external environment and he further argued that external independent directors may serve to connect the external resources with the firm to overcome uncertainty, which is very important for long term sustainability. This was emphasized in the corporate governance which explains that a majority of external members could bring the most needed business skill into institutions. Further resource dependency theory was supported through the appointment of external members to the board as a way of obtaining multiple skills and because of their opportunities to gather information and networking in various ways.

2.3 Empirical Review and Hypotheses Development

The empirical findings of the relationship between corporate governance indicators such as board size, board independence, board diversity, size of audit committee, educational qualification of the board members, board members experience, Age, Size of MFIs, capital adequacy, and leverage ratio and their effect on profitability financial performance were reviewed by researcher.

- a) **Board size:** refers to the total number of directors on the board of each sample firm which is inclusive of the CEO and Chairman for each accounting year. This will include outside directors, executive directors, and non-executive directors. The empirical studies were found that there is a negative relationship between capital adequacy and financial performance (Beisland et al., 2014; Love 2011; Dembel, 2019; García-Pérez et al., 2020; Okoye et al., 2021). Therefore, the researcher has developed the tentative statement as;

H1 : Board size *has a negative and statistically significant impact on profitability*

- b) **Board educational qualification:** refers to Him/her shall be at least a college graduate or have sufficient experience in managing the business to substitute for such formal education. Findings of prior studies by García-Pérez et al., (2020) and Okoye et al., (2021) were confirmed that *board education qualification* has a positive effect on the profitability of MFIs. So it can be hypothesized:

H2 *Board education qualification has a positive and statistically significant impact on profitability*

- c) **Board diversity:** A simple and common measure to promote heterogeneity in the boardroom commonly known as gender diversity – is to include female representation on the board. Empirical studies like Beisland et al., (2014); Dembel (2019); and García-Pérez et al., (2020) Okoye et al., (2021); were found that board diversity has a positive effect on profitability. Therefore, the researcher has developed the tentative statement as:

H3 *board diversity positive and statistically significant effect on profitability*

- d) **Size of the audit committee:** Most audit committees have 3-4 members and are usually chaired by persons with experience as a CFO, external auditor, or CEO. The work of scholars such as Beisland et al., (2014); Dembel (2019); and García-Pérez et al., (2020) evidenced that loan to total assets has a statistically significant and negative effect on profitability.

H4 Size of the audit committee has a negative *effect* on profitability

- e) **Company size:** is determined by thresholds for turnover, balance sheet total (meaning the total of the fixed and current assets), and the average number of employees. Prior studies by Beisland et al., (2014); Dembel (2019); and García-Pérez et al., (2020) found that there is a positive relationship between size of MFI and profitability. So the hypothesis has been developed as follow:

H5 Size of MFI has a positive effect on profitability.

- f) **Capital adequacy ratio:** is a measure of how much capital a bank has available, reported as a percentage of financial institutions' risk-weighted credit exposures. Different researchers such as Beisland et al., (2014); Dembel (2019); and García-Pérez et al., (2020 and García-Pérez et al., (2020) have found a positive and statistically significant associations between capital adequacy and MFIs profitability. So the hypothesis has been developed as follow:

H6 capital adequacy *has a positive and statistically significant effect on profitability.*

- g) **Leverage ratio:** In finance, leverage is any technique involving using debt rather than fresh equity in the purchase of an asset, with the expectation that the after-tax profit to equity holders from the transaction. Prior studies of Beisland et al., (2014); Dembel (2019); and García-Pérez et al., (2020) were confirmed that the Leverage of MFIs has a positive and statistically significant effect on profitability has a positive effect on the profitability of MFIs.

H7 Leverage *has a positive and statistically significant effect on profitability of MFIs.*

- h) **Liquidity:** refers to the ease with which an asset, or security, can be converted into ready cash without affecting its market price. Previous studies by Wang (2002); Alshatti (2015); and García-Pérez et al., (2020); Beisland et al., (2014); García-Pérez et al., (2020) were evidenced that liquidity MFIs *of has negative and statistically significant effect on profitability.*

H8 liquidity MFIs *of has a negative and statistically significant effects on profitability*

- i) **Non-performing loan:** A nonperforming loan (NPL) is a loan in which the borrower is in default because they have not made the scheduled payments for a specified period. Prior studies such as Sri Patni, & Sri Darma (2017); Putranto, A. A., Kristanti, F. T., & Mahardika, D (2017); and García-Pérez et al., (2020) found that the NPL ratio of MFIs has a negative effect on profitability.

H9 NPL ratio of MFIs *has a negative effect on profitability*

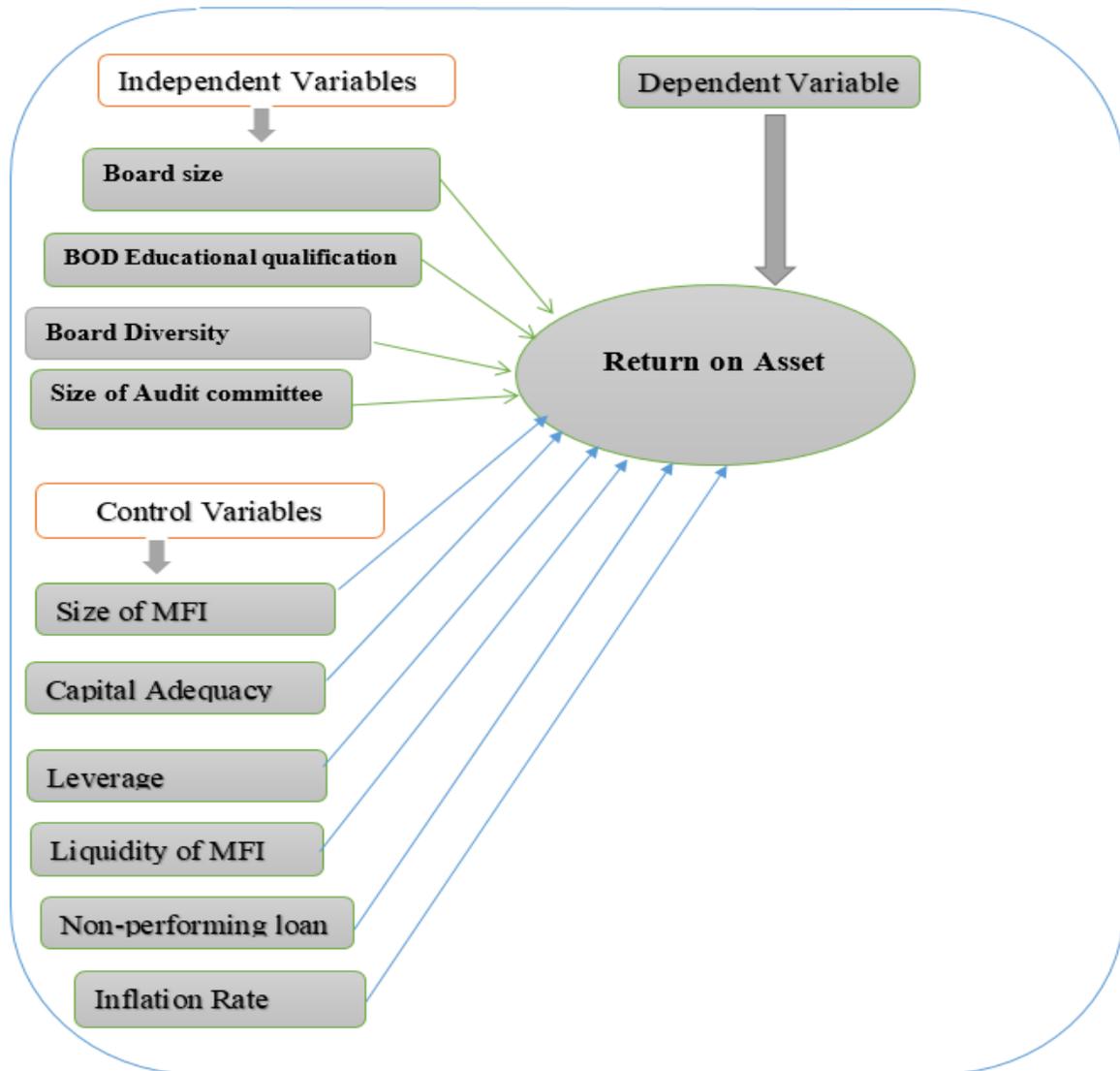
- j) **Inflation Ratio:**

Inflation is the rate of increase in prices over a given period. Inflation is typically a broad measure, such as the overall increase in prices or the increase in the cost of living in a country. Empirical evidence of Myra V. De Leon (2020); and ALTaleb & Alkhatib (2015) were found out that inflation rate has a positive effect on profitability. So that it can be hypothesized that

H10 The inflation rate has a negative and statistically significant effect on profitability

2.4 Conceptual Framework

Different empirical pieces of evidence suggested that the financial performance of financial institutions specifically MFIs is affected by a different factors. This study will be used of MFIs financial performance by using board size, board independence, board diversity, audit committee size, educational qualification of the board members, board members experience, Age, Size of MFIs, capital adequacy, and leverage ratio as explanatory variables. The study will identify how these variables affect the financial performance of MFIs in Ethiopia.



Source: Own development (2021)

Figure 1 Conceptual Framework of the study

3. Materials & Methods

3.1 Research Design:

The researchers employed an explanatory research design because; the objective of the study was to identify the effects of corporate governance on the financial performance of Ethiopian microfinance institutions.

3.2 Research Approach:

The research approach was employed in this study was a mixed research approach due to the qualitative and quantitative nature of data. By combining time-series and cross-section observations, panel data give “more informative data, more variability, less co-linearity among variables, more degrees of freedom and more efficiency.

3.3 Target Population:

The target population for this particular study will be some selected microfinance institutions currently operating in Ethiopia. According to AEMFI, (2020), there are 35 microfinance institutions that are providing a microfinance service to the poor society in Ethiopia. The population of this study was 35 micro-finance institutions in Ethiopia. To achieve this goal, MFIs that satisfies in terms of data availability of 10 years is used as a unit of analysis.

3.4 Sampling Techniques:

The sampling technique deployed for the study will be non-probability sampling techniques. The purposive sampling technique will be used to select 30 MFIs from the industry where the financial statements required for 10 years to the most recent date were found eligible. The sampling units that satisfy the criteria are Amhara Credit and Saving Institutions S.C (ACSI); Addis Credit and saving Institutions S.C (ADCSI), Adeday Microfinance Institution, Afar Microfinance S.C, Aggar Microfinance S.C, Africa Village Financial services S.C (AVFS), BenshangulGumuzMicrofinance S.C, BussaGonofaMicrofinance S.C, Dedebit Credit and saving Institutions S.C (DECSI), DiredawaMicrofinance S.C (Dire), DigafMicrofinance S.C Dynamic Microfinance Inst.S.C, EshetMicrofinance S.C, GambelaMicrofinance S.C, GashaMicrofinance S.C, HararMicrofinance S.C, HarbuMicrofinance S.C, Kendal Microfinance, Lefayeda Credit and Saving S.C Microfinance Institutions. The data for the remaining Microfinance institutions were not accessible in the database as the criteria employed were excludes them from the sample.

Table 1 Summary of the target population, sampling techniques, and sample size.

Target population	Sampling techniques	Sample size
35 MFIs operating in Ethiopia	Purposive	30 MFIs were selected

Source: own construction, 2021

3.5 Data Collection and Analysis Instruments:

To collect appropriate data for the stud, a document review, structured questionnaire, and direct personal interview will be employed. After the accomplishment of the data collection procedure, it will be classified as per each variable; the qualitative data was coded to be measured quantitatively. In this research, both descriptive and inferential statistics will make with the help of E-views software version 13.

3.6 Econometric Model Specification:

The financial performance of MFIs is a quantitative variable that can be measured through multiple linear regression models. In the multiple linear regression model, the dependent variable financial performance (ROA) and 10 independent variables board size, board independence, board diversity, and audit committee size, educational qualification of the board members, board members experience, Age, Size of MFIs, capital adequacy, and leverage ratio as explanatory variables and the error- by u, the model is given by the following Equation as:

$$ROA_{it} = \beta_0 + \beta_1 * BS_{it} + \beta_2 * BEQ_{it} + \beta_3 * BD_{it} + \beta_4 * SAC_{it} + \beta_5 * SMF_{it} + \beta_6 * CA_{it} + \beta_7 * LEV_{it} + \beta_8 * LMFI_{it} + \beta_9 * NPL + \beta_{10} * IR + U_{it} \dots \dots \dots (1)$$

Whereas:

- ROA= Financial Performance
- β_0 = Constant Term
- $\beta_1, \beta_2, \beta_3, \beta_4 \dots \beta_8$ refers to coefficients
- BS = Board size

EQB= Educational qualification of the board members
 BD = Board Diversity
 SAC = Size of the Audit committee in the board
 SMFI= Size of MFI
 CA= Capital Adequacy
 LER= Leverage of MFI
 LMFI= Liquidity of MFI
 NPL = Non-performing loan
 IR= Inflation Rate
 it= the MFI I for period t.
 Ü = is error term

3.7 Operational Definitions of variables

Table 2: Operational definitions of variables

Category	Variables	Measurement
Dependent variables	Return on Asset (ROA): Return on asset is a financial ratio that shows the percentage of profit that a company earns concerning its overall resources.	$ROA = \frac{Net\ income}{Total\ Asset}$
Independent Variables	Board size: MFIs should give attention for the board size to be small in number, adhering to the minimum requirement of the National Bank of Ethiopia which is seven, to an optimal level with better educational qualification, since small board size with better educational qualification is more effective in monitoring and overseeing the management and help to improve performance.	A total number of members on the board.
	Educational qualification of board members: This is measured by the proportion of board members having a college degrees or higher to the total number of board members. Educational qualification is an important determinant of board effectiveness.	The proportion of board members having a college degrees or higher to the total number of board members.
	Board Diversity: Measured in terms of gender diversity and specifically the percentage of women directors to the total members in the board	Percentage of women on the board
	Size of the Audit committee in the board: The size of an audit committee in a board refers to the total number of MFIs' audit committee members out of the total number of board of directors and affects MFI's performance and it is highly believed that it ensures effective monitoring	The total number of MFIs' audit committee members out of the total number of board of directors affects MFI's
	Size of MFIs: Another control factor that can affect the financial performance of banks in Ethiopia is their size. It is measured as the natural logarithm of total assets at year-end.	measured as the natural logarithm of total assets at year-end
	Capital adequacy ratio: Capital is the amount of own funds available to support the banking business. The ratio of Equity to total Assets is employed	$CAR = \frac{Equity}{Total\ Assets}$

	as a measure for Capital Adequacy. This measures the percentage of the total asset that is financed with equity or capital. Capital adequacy, therefore, describes the sufficiency of the amount of equity that can absorb shocks that a firm may experience.	
Control Variables	Debt to Equity Ratio: Financial structure is the explicit mix of long-term debt and common equity that a firm uses to finance its operations. It refers to the balance between all of the firm's liabilities and its equities.	$DER = \frac{Total\ Debt}{Total\ Equity}$
	Liquidity of the bank (LM): Liquidity is another factor that determines the level of banks performance. Liquidity refers to the ability of the bank fulfil its obligations, mainly of deposit. In line with theory of agency costs empirical studies conducted in Ethiopia by (Deyganto&Kumari, 2019).	H8: Liquidity has Statistically Significant Negative Impact on Financial Performance.
	Non-performing loan ratio is a ratio that measures the proportion of non-performing loans against the total loans for a period. It gives an assessment of the total borrowers default on the conditions of loans and advances for a given period. It simply measures the efficiency of the loan portfolio management for a given bank within a given period	$NPL\ ratio = \frac{NPL}{Total\ loan}$
	Inflation: Huang & Liu (2005) Inflation is the rate of increase in prices over a given period of time. Inflation is typically a broad measure, such as the overall increase in prices or the increase in the cost of living in a country.	Subtract the past date CPI from the current date CPI and divide your answer by the past date CPI. Multiply the results by 100.

Source: own construction (2021)

4. Results

4.1 Descriptive Statistics results

This section presents the descriptive statistics of dependent and independent variables used in the study for the sampled MFIs of Ethiopia. The dependent variables used in this study was ROA while the independent variables were board size (BS), board education quality (BEQ), board diversity (BD), audit committee size (ACS), size microfinance (SMFI), capital adequacy ratio (CAR), leverage (LEVR), microfinance liquidity (MFL), non-performing loan (NPL), and inflation rate IFR. Table 3 demonstrates the mean, maximum and minimum values and standard deviation of the dependent and independent variables over the study period.

Table 3 Summary of descriptive statistics

	ROA	BS	BEQ	BD	ACS	SMFI	CA	LEVR	MFL	NPL	IFR
Mean	0.0322 38	1.2428 80	3.2600 53	2.6944 38	0.0056 24	3.5007 06	2.2308 16	2.8190 69	3.9596 37	4.155 13	2.453 51
Maximum	0.0953 0	6.5249 0	7.3854 0	7.3849 0	0.0572 0	7.3849 0	8.2774 0	8.6965 0	11.875 6	8.293 30	8.293 30
Minimum	0.0053 0	0.1660 0	0.2455 0	0.1660 0	0.0002 0	1.0556 0	0.0541 0	0.7293 0	1.1046 0	1.180 50	0.001 20
Std. Dev.	0.0272 1	1.7603 3	1.8520 1	2.9443 3	0.0078 5	2.4330 1	1.7028 1	2.5488 1	2.5457 8	2.121 63	3.008 04
Observations	150	150	150	150	150	150	150	150	150	150	150

Source: E-views 13 results, 2021

According to table 3 above, the financial performance of MFIs, as measured by ROA (net income to total asset) for 150 observations (panel data of 30 MFIs for 5 years) has a mean value of 23.23 percent. The result indicates that the sampled MFIs on average earned a profit of 0.023 cents from one birr invested in the asset. The maximum value of the ROA was 9.5 percent and the minimum value of 0.5 percent with the standard deviation of 0.02721 this shows that profitable CBEs earned 0.0492 cents of profit for a single birr invested their assets. On the other hand, the least profitable CBEs earned 0.00530 cents of profit for each birr invested in their assets during the study period. The standard deviation of 0.02721 shows the profitability variations of MFIs mean to profit from an actual value. Board size also has a mean value of 124.28percent. The mean value result suggested that 1.242880 cents of one birr will be loosed because increasing in board size; the maximum value of capital adequacy was 6.52490 percent and the minimum value of 0.16600 percent with a standard deviation of 1.76033.

Board education qualification has a mean value of 3.260053 percent. The mean value of education sampled MFIs was leveraged on average 3.260053 times of their equity. The maximum value of education qualification was 7.38540 percent and the minimum value of 0.24550 percent with a standard deviation of 1.85201 times. This implies that as education qualification increases, the financial performance of MFI is increases. Concerning explanatory variables deployed in table 4.1 above, the mean value board diversity was 2.694438 percent indicating that on averaged sampled MFI have 2.694438 in running a business. The maximum value was 7.38490 percent and the minimum value of 0.16600percent with a standard deviation of 2.94433 it shows the profitability variations of MFI due to diversification of board which boosts the effectiveness of MFIs.

Regarding the Size of the audit committee has a mean value of 0.005624 percent. The mean value of the Size of the audit committee indicates that sampled MFIs were on average of 0.005624 cents of one birr asset. The maximum value of the Size of the audit committee was 0.05720 percent and the minimum value was 0.00020 percent with a standard deviation of 0.00785. Another explanatory variable also the size of MFIs played an important role for organizations to maintain their market position. The mean value of this variable was 3.500706 percent in its natural logarithms value. The maximum value of size was 7.38490 percent and the minimum value of 1.05560 percent with a standard deviation value of 2.43301. Capital adequacy also has a mean value of 2.230816 percent. The mean value result suggested that 2.230816 cents of one birr asset was financed by shareholders equity while the remaining 88 cents was financed through debt. The maximum value of capital adequacy was 8.27740 percent and the minimum value of 0.05410 percent with a standard deviation of 1.70281. On the other hand, the mean value of the non-performing loan was 4.15513 which indicate that the average ratio of NPL over the total loan is more than 1 percent. The maximum of this ratio is

8.29330 percent and the minimum value is 1.18050 percent. The maximum value of 8.29330 indicates the presence of high credit risk in some of the banks. The standard deviation for NPLR of shows the deviation of 2.12163 from the average mean value among banks' credit risk exposure. This implies that the presence of non-performing loans of MFIs ranges from 1.18 percent to 8.29 percent.

The average value of leverage was 2.819069. The result indicates that, MFI in on average capital structure financing with more debt than financing to equity capital. On the other hand, the maximum value of the capital structure was 8.69650 averages. This result indicates the institution financing is more considered debt financing than equity financing and the minimum value of 0.72930 averages show the MFI few finances on the equity with the standard deviation of 2.54881 averages which indicates the deviation of the disturbance of the distribution. Regarding liquidity management has a mean value of 3.959637 percent. The mean value of liquidity indicates that sampled MFIs were average more than 3birr of one birr asset. The maximum value of liquidity was 11.8756 birrs and the minimum value 1.10460 birr with a standard deviation of 2.54578 which is the deviation of actual liquidity management from its mean value. Inflation has a mean value of 2.45351 percent. Inflation is the rate at which the value of a currency is falling and, consequently, the general level of prices for goods and services is rising. The mean value of inflation indicates that sampled branches were leveraged on average 2.45351 times of their equity. The maximum value of the gearing ratio was 8.29330 percent and the minimum value of 0.00120 percent with a standard deviation of cents to 3.00804 percent.

4.2 Correlation Analysis

The following table shows the result of correlation analysis to determine the relationship between the dependent variable (ROA) while the independent variables were board size (BS), board education quality (BEQ), board diversity (BD), audit committee size (ACS), size microfinance (SMFI), capital adequacy ratio (CAR), leverage (LEVR), microfinance liquidity (MFL), non-performing loan (NPL), and inflation rate (IFR).

Table 4: Correlation Analysis among Variables

Items	ROA	BS	BEQ	BD	ACS	AG	CA	LEV	MFL	NPL	IFR
ROA	1										
BS	-0.118	1									
BEQ	0.4132	0.5143	1								
BD	0.5061	0.4331	0.558	1							
ACS	-0.1250	0.0556	0.1361	0.0436	1						
AG	0.5208	0.3558	0.6004	0.6501	0.1141	1					
CA	0.0941	0.2457	0.1833	0.0607	0.2123	0.0954	1				
LEV	0.3265	0.4262	0.2264	0.5778	0.3071	0.1255	0.5138	1			
MFL	-0.5455	0.3086	0.4214	0.5504	0.2023	0.6124	0.0161	0.2008	1		
NPL	-0.2272	0.2825	0.5879	0.6248	0.1015	0.6956	0.2421	0.0579	0.3733	1	
IFR	-0.3667	0.4260	0.5702	0.9329	0.0436	0.7153	0.0426	0.5028	0.4943	0.7125	1

Source: E-views 13 results, 2021

As shown in table 4 above, board education quality, board diversity, audit size microfinance, capital adequacy ratio, and leverage were positively correlated with ROA with a correlation coefficient of 0.4132, 0.5061, 0.5208, 0.0941, and 0.3265 respectively. This correlation shows that the coefficient as the aforementioned variables increases return on asset also moves to the same direction Whereas, board size (BS), audit committee size, microfinance liquidity, non-performing loan, and inflation rate with a coefficient of -0.118, -0.1250, -0.5455, -0.2272, and -0.3667 respectively. This implies that as the variables increase, the return on asset moves in the opposite direction. Besides the correlation among explanatory variables is not exceed 90% which implies no multicollinearity problem.

4.4 Testing of Model Assumptions

Before going further into panel data econometric procedures, other diagnostic tests were undertaken to ensure that the assumptions of the classical linear regression model were fulfilled or not, the coefficient estimators of both α (constant term) and β (independent variables) that are determined by ordinary least square (OLS) have several desirable properties and usually known as Best Linear Unbiased Estimators (BLUE). Hence, the following sections discuss the results of the diagnostic tests (i.e., normality, autocorrelation, heteroscedasticity,) that were conducted to ensure whether the data fits the basic assumptions of the classical linear regression model or not.

4.4.1 Test for Normality

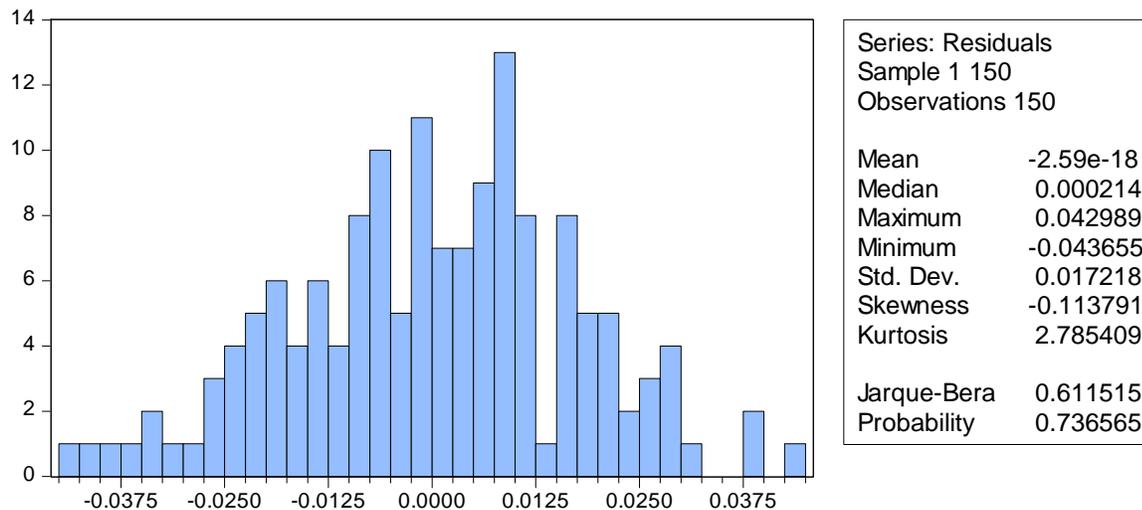
If the residuals are normally distributed, the Jarque-Berastatistic would not be significant at a 5 percent significant level meaning disturbance to be normally distributed around the mean. This means that the p -value given at the bottom of the normality test screens should be bigger than 0.05 to not reject the null hypothesis of normality at a 5 percent significant level. Jarque-Bera also formalized this by testing the residuals for normality and testing whether the coefficient of skewness and kurtosis are close to zero and three respectively. The hypotheses for the normality test were formulated as follow:

H₀: Error term is normally distributed

H₁: Error term is not normally distributed

Decision Rule: Reject H₀, if P-value is less than significant level 0.05. Otherwise, do not reject.

Figure 2 Normality test for residuals of ROA model



Source: E-views13 result, 2021

The normality test result of the ROA model in figure 2 above shows, the histogram was bell-shaped and the Jarque -Bera statistic has a probability of (0.7363) implying that the p -value for the Jarque-Bera test for this model is greater than 0.05. So, the result indicates that the errors were normally distributed and there was no problem of normality on the ROA model. Based on the statistical result, the study failed to reject the null hypothesis of normality at the 5 percent significance level.

4.4.2 Test for Heteroscedasticity

Among the OLS assumptions, one of the diagnostic tests conducted in this study is the heteroscedasticity test. This is theoretically expressed as by Brooks (2008, p.133) ‘var (ut)=σ²’;it has been assumed that the variance of the errors is constant,σ². In the classical linear regression model, one of the basic assumptions is the Homoscedasticity assumption that states as the probability distribution of the disturbance term remain the same for all observations. That is the variance of each disturbance term is the same for all values of the explanatory variable. However, if the disturbance terms do not have the same variance, this condition of non-constant variance or non-homogeneity of variance is known as heteroscedasticity. Accordingly, to detect the heteroscedasticity problems, the Breusch-Pagan test was utilized in this study. This test states that if the p-value is significant at 99 confidence interval, the data has a Heteroscedasticity problem, whereas if the value is insignificant (greater than 0.01), the data has no Heteroscedasticity problem.

It is hypothesized that as follows;

Ho: There is no Heteroscedasticity problem

Ha: There is a Heteroscedasticity problem

Decision Rule: RejectH₀, if P-value less than significant level 0.05. Otherwise, do not reject.

Table 5 Heteroscedasticity test for ROA Model

Heteroscedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.011354	Prob. F(1,147)	0.9153
Obs*R-squared	0.011508	Prob. Chi-Square(8)	0.9146
Scaled explained SS	5.432385	Prob. Chi-Square(8)	0.7105

Source: E-views 13 results, 2021

Accordingly, table 5 above shows that, both the F-statistic and Chi-square tests give the same conclusion that there was no significant evidence for the presence of Heteroscedasticity in the ROA model. Since the p-values in all of the cases were above 0.05, the null hypothesis of there is no Heteroscedasticity problem is failed to reject at a 5 percent significant level.

4.4.3 Test for Autocorrelation

The third assumption made for the CLRM’s disturbance terms is that the covariance between the error terms over time is zero. In other words, it is assumed that the errors are uncorrelated with one another. If the errors are correlated with one another, it would be stated that they are ‘auto-correlated’ or that they are ‘serially correlated’. In the case of the autocorrelation problem, the estimated parameters can remain unbiased and consistent, but it is inefficient. The result of the t-test, F-test, or the confidence interval will become invalid due to the variances of estimators tending to be underestimated or overestimated. Due to the invalid hypothesis testing, it may lead to misleading results on the significance of parameters in the model. Breusch-Godfrey Serial Correlation LM Test was used in this study to detect the autocorrelation problem. It is hypothesized that as follows;

Ho: no serial correlation

H1: the presence of serial correlation

Decision Rule: RejectH₀, if P-value less than significant level 0.05. Otherwise, do not reject

Table 6: Test for serial correlation of ROA model

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	1.233383	Prob. F(30,109)	0.2160
Obs*R-squared	38.01483	Prob. Chi-Square(30)	0.1484

Source: E-views 13 results, 2021

As it can be seen from the above tables 6, the P-value of both F-statistic and Chi-Square for the ROA model was (0.2160) and (0.1484) respectively, which were greater than the significance level of 5 percent. Hence, the null hypothesis of no serial correlation is failed to reject at 5 percent of significant level, the result supports the absence of serial correlation in this model. Therefore, it can be concluded that the covariance between residuals is zero, and the absence of serial correlation problem was found conclusively from the LM tests.

4.5 Regression result random effect regression

Table 7 Random effect regression results on ROA model

Dependent Variable: ROA				
Method: Panel EGLS (Cross-section random effects)				
Date: 20/12/21 Time: 05:45				
Sample: 2016 2020				
Periods included: 5				
Cross-sections included: 30				
Total panel (balanced) observations: 150				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Board Size	-0.004124	0.001015	-4.063677	0.0001***
Board Education	0.002484	0.001120	2.219001	0.0281**
Board Diversity	0.007710	0.001584	4.866267	0.0000**
Size of Audit committee	-0.124276	0.206060	-0.603103	0.5474
Size of MFIs	0.007143	0.001037	6.890359	0.0000***
Capital adequacy	0.003436	0.001071	3.208886	0.0017***
Leverage	0.004862	0.001010	4.815452	0.0000***
Liquidity	-0.002027	0.000739	-2.744740	0.0069***
Non-Performing Loan	-0.002251	0.001135	-1.982786	0.0494**
Inflation Rate	0.009390	0.001577	5.952686	0.0000***
Constant	0.003234	0.006704	0.482440	0.6303
Effects Specification				
			S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			0.016604	1.0000
Weighted Statistics				
R-squared	0.949202	Mean dependent var		0.032238
Adjusted R-squared	0.923964	S.D. dependent var		0.027219
S.E. of regression	0.016691	Sum squared resid		0.038724
F-statistic	25.72391	Durbin-Watson stat		2.019625
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.649202	Mean dependent var		0.032238
Sum squared resid	0.038724	Durbin-Watson stat		2.019625

The Analysis was made based on 1(***), 5(**) & 10(*) percent significant levels.

Source: E-views 13 result (2021)

As shown in the table above, the R-squared statistics of the model were 94.92 percent. This result indicates that 94.92 percent of the variation in the dependent variable is explained by the explanatory variables. That means the explanatory variables (such as Board Size, Board Education, Board Diversity, Size of the Audit committee, Size of MFIs, Capital adequacy, Leverage, Liquidity, Non, Performing Loan, and Inflation Rate are jointly explaining about 94.92 percent of the variation in the return on asset. The remaining 5.08 percent of the variation in the financial performance of commercial banks was measured by return on asset explained by other variables which are not included in the model during the study period.

$$ROA = 0.00323405 + (-0.0041240) \cdot BS + 0.0024843 \cdot BEQ + 0.00770981 \cdot BD - 0.1242755 \cdot ACS + 0.00714327 \cdot MFS + 0.003435811 \cdot CA + 0.0048617859437 \cdot LEV - 0.00202722 \cdot MFL - 0.0022513 \cdot NPL - 0.00939797 \cdot IR + e \dots \dots \dots (2)$$

Besides this, F- statistics (25.72391) which is used to test the overall significance of the model was presented and the null hypothesis can be rejected at 1 percent level of significance, since the p-value was (0.000000) which was sufficiently low, indicates the reliability and validity of the model at 1 percent level of significance.

Based on the results shown in table 7 above, all explanatory variables such as board size, Board Education, Board Diversity, Size of MFIs, Capital adequacy, Leverage, Liquidity, None, Performing Loan, and Inflation Rate had a statistically significant impact on the financial performance of banks in Ethiopia measured by Return on Asset.

On the other hand, the size of the audit committee is the only variable not statistically significant. Among the significant variables with their regression coefficients, board size (-0.0041240), audit committee size (-0.1242755), liquidity (-0.00202722), non-performing loan (-0.0022513), inflation rate (-0.00939797) have negative effect on financial performance of MFIs. On other hand, board education, board diversity, size of MFIs, capital adequacy, and leverage have a positive impact on the ROA of MFIs in Ethiopia.

5. Discussion

The main objective of this study is to analyze the effect of Corporate Governance on the Financial Performance of micro financed institutions in Ethiopia. The discussion is focused on nine significant variables such as board size, board education, board diversity, size of the firm, capital adequacy, leverage, liquidity, non-performing loan, and inflation rate. The result of this study shows that support from the existence of board size, with a coefficient of regression [$\beta = -0.004124$] has a positive and statistically significant at 1% level of significance since (p-value of $0.0001 < 0.01$). Hence, hypothesis H1 is accepted. This finding is consistent with the idea of the study is similar to the previous study by Beisland et al., (2014); Love (2011); Dembel, (2019); García-Pérez et al., (2020); Okoye et al., (2021) were found out that there is negative relationship between board size and financial performance.

The result of this study concerning education qualification of the board with a coefficient of regression [$\beta = 0.002484$] has a positive and statistically significant at 1% level of significance since (p-value of $0.0281 < 0.05$). Hence, hypothesis H2 is accepted. This finding is consistent with the idea of the study is similar to findings of prior studies by García-Pérez et al., (2020) and Okoye et al., (2021) which confirmed that Board educational quality loan has a positive effect on the profitability of MFIs. This implies that there is a positive relationship between the education qualification of the board and profitability.

With regards to board diversity the result of this study showed a coefficient of regression [$\beta = 0.007710$] has a positive and statistically significant at a 1% level of significance (p-value of $0.000 < 0.01$). Hence, hypothesis H3 is accepted. This finding is consistent with the idea of the study is similar to previous research by Nuhu & Hussani (2017); García-Pérez et al., (2020); and Okoye et al., (2021) were found out that board

diversity has a positive effect on banks profitability. This implies that there is a positive relationship between board diversity and profitability. The result of this study concerning the size of MFIs with a coefficient of regression [$\beta=0.007143$] has a positive and statistically significant at 1% level of significance since (p-value of $0.0017 < 0.01$). Hence, hypothesis H5 is accepted.

With regards to MFIs size the result of this study showed a coefficient of regression [$\beta=0.007143$] has a positive and statistically significant at a 1% level of significance (p-value of $0.000 < 0.01$). Hence, hypothesis H5 is accepted. This finding is consistent with the idea of the study is similar to previous research by Beisland et al., (2014); Dembel (2019); and García-Pérez et al., (2020) were found that there is a positive relationship between size of MFI and profitability. This implies that there is a positive relationship between the size of MFIs and profitability.

Concerning capital adequacy with a coefficient of regression [$\beta=0.003436$] has a positive and statistically significant at 1% level of significance since (p-value of $0.0017 < 0.01$). Hence, hypothesis H6 is accepted. This finding is consistent with the idea of the study is similar to previous research by Dembel(2019); Beisland et al., (2014); Dembel (2019); and García-Pérez et al., (2020) were found a positive and statistically significant associations between capital adequacy and ROA. This implies that there is a positive relationship between banks' capital and profitability.

The result of this study concerning leverage with a coefficient of regression [$\beta=0.004862$] has a positive and statistically significant at 1% level of significance since (p-value of $0.000 < 0.01$). Hence, hypothesis H7 is accepted. This finding is consistent with the idea of the study is similar to previous research by Beisland et al., (2014); Dembel (2019); and García-Pérez et al., (2020) and García-Pérez et al., (2020) leverage of MFIs has a positive effect on profitability. This implies that there is a positive relationship between leverage and financial performance.

The result of this study with regards to liquidity with a coefficient of regression [$\beta= -0.020494$] has negative and statistically significant at 1% level of significance since (p-value of $0.0012 < 0.01$). Hence, the researcher accepted hypothesis H5. This finding is consistent with the finding of another study by Wang (2002); Alshatti (2015); and García-Pérez et al., (2020) were evidenced that liquidity MFIs of has a negative and statistically significant effect on cost-effectiveness. So it can be concluded that an increase in liquidity management has negative relation with the financial performance of MFIs in Ethiopia.

Regarding the non-performing loan of MFI [$\beta= -0.002251$] is a negative and statistically significant effect on the financial performance of commercial banks with a p-value ($0.049 < 5\%$, level of significance. Therefore, hypothesis H₉ is accepted by the researcher. The regression result of studies conducted in Ethiopia by similar to studies by Sri Patni, & Sri Darma (2017); Putranto et al., (2017) were found out that NPL ratio of MFIs has a negative effect on profitability. The regression result concerning inflation rate with a regression coefficient of ($\beta= -0.002251$) showed that bank liquidity has a negative effect on the financial performance of MFIs.

Regarding the inflation rate and ROA of MFI [$\beta= -0.009390$] which is negative and significant at 1% level of significance. So the researcher accepted H10. The researcher findings supported by Aghaee&Kazempour, M. (2013); ALTaleb&Alkhatib (2015), and Myra V. De Leon (2020) were found out that inflation rate has a positive effect on profitability found out that the inflation rate has a positive effect on profitability. It indicates that an increase in the value of this variable leads to an increase in the financial performance of MFIs in Ethiopia.

6. Conclusion

Based on the study findings, the financial performance of commercial banks measured by ROA was affected by the variables included in this study. Since, they were found to be the most significant variables that affect financial performances of MFIs measured by ROA were Board Size, Board Education, Board Diversity, Size of MFIs, Capital adequacy, Leverage, Liquidity, Non-Performing Loan, and Inflation Rate. The board size has a negative and statistically significant impact on ROA; which means an increase in the value of this variable leads to a decrease in the financial performance of MFIs measured by ROA. MFIs should give attention for the board size to be small in number, adhering to the minimum requirement of the National Bank of Ethiopia which is seven, to an optimal level with better educational qualification, since a small board size with better educational qualification is more effective in monitoring and overseeing the management and help to improve performance. Moreover, the larger the number of board of directors the less will be its contribution to performance, as revealed by this study, necessitates the need to have the small number of board of directors.

The education qualification of the board has a positive effect on ROA. This means education qualification of the board of directors is found to be contributing positively to the financial performance of MFIs. Thus, MFIs, as far as possible, should consider having a board of directors with a master's degree or above. MFIs better improve their board diversity by mixing both genders. It is good for MFIs to have a board of directors with a mix of male and female and business management experience because having boards of directors with an appropriate levels of business management experience from both sexes would have a positive contribution to the performance of MFIs.

MFIs have to increase the size of their debit to make them the best financial performer by accepting more deposits from the public. Because, banking industry, debt is mostly used as an indication of more investing it plays an important role in company success and growth. The primary responsibility of the board of directors is to protect the shareholders' assets and ensure they receive a decent return on their investment. The effective board should satisfy two main functions, the first one is the advisory function by consulting with management regarding the strategic and operational direction of the company. The second one is the oversight function by monitoring the senior management, company performance and reducing the agency cost. Both together enable the firm to generate improved financial performance.

MFIs better strengthen their capital to make them the best financial performer by selling the additional shares to existing members and new entrants to the public. Because MFI industry investment and improving their fee-based income by introducing innovative products and services for example mobile banking. The regression result provides evidence that rising liquidity management which is an indication of a weaker or declining level of financial performance, negatively impacts the financial performance of MFIs, measured by return on asset. Thus, the bank's management better sell the money rather than deposit the money in the bank and in a safe box. Enhance their liquidity management to reduce liability and increase their financial performance, measured by return on asset. To be financially prudent and economically viable institutions, a proper supervisory and regulatory environment was better established by applying financial sector rules and regulations to protect commercial banks against poor financial management. This study, therefore, recommends that the management of banks better devise strategies of increasing savings/deposits. This could be achieved by recruiting more members into the MFIs. Members' contributions from the savings/deposit in the banks are used to extend loans to members and at the same time members provide a ready market for the loans. Loans constitute the highest percentage of the total assets in the banks and assets are used to generate future revenues.

Concerning non-performing, the regression result of this study showed that non-performing loan has a

negative and statistically significant effect on the ROA of MFIs in Ethiopia. This indicated that there is a significant negative association between non-performing loans and the financial performance of the MFIs. Hence the researcher recommended the MFIs reduce non-performing loans since it has a negative effect on the financial performance of the MFIs. The MFIs should reduce the non-performing loan according to proclamation no. 97/1998 a proclamation to provide for property mortgaged or pledged by banks gave banks a right to sell properties that they hold as collateral and the borrower fails to pay the loan. These is also additional tool for banks to minimize the risk and also to increase their profit accordingly. Finally, based on the findings related to the tenth hypothesis it can be concluded that inflation has a positive and statistically significant impact on ROA; which indicates that aincreasein the value of this variable leads to an increase in the financial performance of MFIS in Ethiopia.

7. Suggestions for Further Research

This study was not an end to itself. Many issues arise from the findings and may require further research to address them. For instance, a study can be carried out to establish the other factors that can explain 5.08 percent variation in the ROA regression models. So, this study faced some limitations that can be filled by future researchers. Researchers can conduct the further study by including more organization-specific, industry-specific, and macroeconomic variables that affect the financial performance of banks and they can be carried out by increasing the sample size as well as the study area at the international level. This same study may be replicated later to find out if the situation remains the same or there will be substantial changes.

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Declarations

Availability of data: data is included in the manuscript.

Competing interests: The author declared that he has no competing interests

Ethics approval: All the studies conducted in this research were approved

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Author's Contributions I have carried out all the whole works of the study. I designed the study research design and carried out the fieldwork, document analysis, literature work, manuscript draft, and editorial.

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References

1. Al-Amarneh, A., &Yaseen, H. (2014). *Corporate governance and dividend policy in Jordan. International Journal of Economics and Finance*, 6(4), 210-219.
2. Alshatti, A. S. (2015). *The effect of the liquidity management on profitability in the Jordanian commercial banks. International Journal of Business and Management*, 10(1), 62

3. ALTaleb, G. S., & Alkhatib, A. (2015). Determinants of Islamic banking operations in Jordan. *Interdisciplinary Journal of Contemporary Research in Business*, 7(2), 34-47.
4. Aghaee, M & Kazempour, M. (2013). A study on relationship between inflation rate and changes in profitability ratios in Tehran Stock Exchange. *Management Science Letters*, 3(11), 2787-2794.
5. Bebchuk, L., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance?. *The Review of financial studies*, 22(2), 783-827.
6. Beisland, L. A., Mersland, R., & Randøy, T. (2014). The Association between microfinance rating scores and corporate governance: a global survey. *International Review of Financial Analysis*, 35, 268-280.
7. Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2009). Microfinance meets the market. *Journal of Economic Perspectives*, 23(1), 167-92.
8. Dembel, B. (2019). The Effect of Corporate Governance Mechanism on the Financial Performance of Microfinance Institutions: Evidence from Ethiopian Microfinance Institutions. *Research Journal of Finance and Accounting*, 10, 19-31.
9. Freeman, R. E., Wicks, A. C., & Parmar, B. (2004). Stakeholder theory and "the corporate objective revisited". *Organization Science*, 15(3), 364-369.
10. Muluneh H.D., Mersland, R. and Mori, N. (2018). Board committees and performance in microfinance institutions: Evidence from Ethiopia. *International Journal of emerging markets*. 13 (2), pp. 350-370.
11. Myra V. De Leon (2020). The impact of credit risk and macroeconomic factors on profitability: the case of the ASEAN banks. *Banks and Bank Systems*, 15(1), 21- 29.
12. David Yermack (2017). *Corporate Governance and Blockchains*, Review of Finance, Volume 21, Issue 1, Pages 7-31
13. Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20(1), 65-91.
14. García-Pérez, I., Fernández-Izquierdo, M. Á., & Muñoz-Torres, M. J. (2020). Microfinance institutions fostering sustainable development by region. *Sustainability*, 12(7), 2682.
15. Huang, K. X., & Liu, Z. (2005). Inflation targeting: What inflation rate to target?. *Journal of Monetary Economics*, 52(8), 1435-1462.
16. Love, I. (2011). Corporate governance and performance around the world: What we know and what we don't. *The World Bank Research Observer*, 26(1), 42-70.
17. Okoye, L. U., Olokoyo, F., Okoh, J. I., Ezeji, F., & Uzohue, R. (2020). Effect of corporate governance on the financial performance of commercial banks in Nigeria. *Banks and Bank Systems*, 15(3), 55.
18. Sri Patni, S., & Sri Darma, G. (2017). Non Performing Loan, Loan to Deposit Ratio, Net Interest Margin, BOPO, Capital Adequacy Ratio, Return on Asset and Return on Equity. *Jurnal Manajemen Bisnis*, 14(2), 166-184.
19. Nuhu, M., & Hussani, S. M. (2017). The empirical study of the relationship between the board of director mechanisms and perceived performance of listed firms in Nigeria. *Journal of Accounting and Finance in Emerging Economies*, 3(2), 159-178.
20. Pfeffer, J. (1972). Size and composition of corporate boards of directors: The organization and its environment. *Administrative science quarterly*, 218-228.
21. Putranto, A. A., Kristanti, F. T., & Mahardika, D. (2017). Capital Adequacy Ratio, Loan Deposit Ratio dan Non Performing Loan terhadap Profitabilitas. *Jurnal Riset Akuntansi Kontemporer*, 9(2), 88-93.
22. Wang, Y. J. (2002). Liquidity management, operating performance, and corporate value: evidence from Japan and Taiwan. *Journal of multinational financial management*, 12(2), 159-169.