

The Performance of Ethiopian Microfinance Institutions in Balancing Social Responsibility and Financial Sustainability

Mitiku Zena Shifa, Lajuan Perronoski Fuller

Virginia, USA

Email: Mitiku.shifa.ciu@gmail.com

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Abstract

The lack of loanable funds exposes historically marginalized societies, such as women, lower-income earners, and rural communities, to situations in which an informal village lender charges exploitative interest rates. The reprioritization of microfinance institutions toward financial sustainability at the expense of social responsibility is a contributor to this problem. This study was an evaluation of the relevance of the business model in measuring performance and comparing the measurement of the balance of social responsibility and financial sustainability by microfinance institutions in Ethiopia. A quantitative research method was used to collect data and one-way analysis of variance was used to compare the business models. The results showed that business models made a difference in measuring the social responsibility performance of microfinance institutions. Nongovernmental and governmental microfinance institutions did not show significant difference in balancing social responsibility and financial sustainability. The two business models were more low-income oriented than were commercial microfinance institutions. The leaders of microfinance institutions and partners should not rush to commercialization but should design and implement a suitable business model that balances social responsibility and financial sustainability without significantly sacrificing one to the other. Hence, local, and international development agencies can enter into partnership with nongovernmental or governmental microfinance institutions to reduce poverty.

Keywords

Business Model, Financial Sustainability, Institutional Theory, Microfinance Institution, Nongovernmental Organization, Nongovernmental Organization-Microfinance Institution, Social Responsibility (Sustainability)

1. Introduction

The diminishing of sources of funds pressures microfinance institutions (MFIs) into commercialization of services that prioritize profit over social mission (Toidi, 2016). Commercialization focuses on profit, market, and competition rather than on social mission. It prioritizes financial sustainability as the driver or sole objective of the MFI. MFIs that chase profit have lower rates of outreach (Pedrini & Ferri, 2016). This research was designed to identify the business models that best balance the financial sustainability and social responsibilities of MFIs in Ethiopia.

The absence of social responsibility hurts the most vulnerable rural farmers and urban petty traders. They suffer from a lack of access to small loans, business development training, and social services. Large business loans can marginalize poor clients and lead to mission drift (Ibrahim, Ahmed, & Minai, 2018; Marek, Marc, & Reichert, 2020). Commercial MFI loans are more expensive than subsidized loans provided by non-governmental organization (NGO) MFIs. If the provision of loan service is not adequately managed, credit problems may push poor borrowers into over-indebtedness (Marek et al., 2020). The high cost of borrowing and access to multiple loans also expose the low-income group to over-indebtedness.

This study was designed to identify the best business model used by MFIs in Ethiopia to balance financial sustainability and social responsibilities without skewing to one end at the expense of the other.

Ethiopia is one of the least developed countries in the world, with more than 112 million people and economic activity that is rural and agriculture based. More than 70% of the population lives in rural areas, where physical and financial infrastructure is limited. Annual per capita income is \$850, one of the lowest in Africa and in the world. The rural and urban low-income communities have limited access to financial services. Services of conventional banks to these marginal communities are absent or limited to simple bank accounts or savings accounts.

The commercial banks in Ethiopia are not friendly to the poor and systematically exclude these communities from formal banking services (Solomon et al., 2019). The exclusion exposes the poor, especially the rural poor, to exploitative interest rates from informal village lenders. The commercial banks' lending system is designed for wealthier clients and established businesses that can provide complete background information, have good sources of income, and seek large loan sizes that are cost effective for the bank.

The article is organized as follows a literature review, research method, research questions, hypotheses, results, a summary of findings, and resultant conclusions.

2. Literature Review

Microfinance plays a critical role in alleviating poverty and brings economic de-

velopment to economically excluded low-income groups in rural and urban areas. The modern form of microfinance was started in the early 1980s by Muhammad Yunus, from Bangladesh (Schmidt, 2018). Microfinance service intervention through micro loans, micro saving, training in financial literacy, and business development for these groups demonstrates that they are bankable and trustworthy to repay loans on time and in full.

MFIs must provide socially responsible services and ensure financial sustainability at both the institutional and client levels (Appendix B, Figure B1). The sustainability of the MFI should not be realized at the expense of the client. The MFI must ensure that its clients are not burdened with the institution's inefficiencies.

MFIs have empowered the poor to get out of poverty and cyclical deprivation to live with dignity and respect (Bos & Millone, 2015; Chib, 2016). The MFI should consider its external social and business environment. According to institutional theory, an institution forms its processes and structure through social interaction, norms, and values, all of which are predominantly subjective (Nebojsa, 2015). The MFI should not be responsive only to its internal efficiencies and economic rationale. As a member of society, the MFI should manifest its social responsibility as a main line of objective, not as an incidental or side issue.

Littlefield, a recognized scholar on the issue of microfinance, asserted that MFIs have helped to reduce poverty, improve purchasing power, and cover essential health and education costs of low-income groups and their families (Chib, 2016). MFIs are used as a policy development tool to reduce poverty (Georgios, 2019). It has been consistently shown that this service to millions of economically active poor in developing countries has realized that goal.

Profit is not the driving force of microfinance service; it is a means to achieve the social mission of the MFI. The main social objective of microfinance service is economic development through micro loans and savings services. Access to finance is essential to advance economic growth and help people to be economically independent and to live a dignified life. Limited or no access to credit services prohibits low-income groups from increasing their household income and accumulating wealth (Venittelli, 2017). The absence of this service makes them vulnerable to informal village lenders who charge exploitative interest rates, which deepens the poverty and dire situation of the community.

Lower-income groups do not fit the mainstream concept of the bankable client. Uncertainty of income, high-risk exposure, lack of credit profile, and transaction costs of lending do not make them good candidates for services from traditional financial institutions. Hence, these communities have been denied access to finance and opportunities to rise out of poverty.

International not-for-profit (NFP) organizations use microfinance as a tool for sustainable economic improvement in traditionally unbankable areas. Microfinance is usually established by an NFP organization with pure development goals to complement their livelihood programs to achieve sustainable development in their operational areas. Microfinance is established either as an

integral part of the NFP as a department or independently as a financial service provider. The service is treated as a program activity, like any other development program.

The scope, governance, and business model of MFIs differ with the regulatory environment and infrastructure in specific countries. The MFI usually starts as a small savings group with a seed fund from an NFP organization. It is used for training and as part of attitude change to direct beneficiaries and their families to manage their finances and learn to save funds for emergencies. What started as a small intervention in limited locations with limited funds has become one of the world's most recognized social innovations to address poverty.

The United Nations Development Program (UNDP) recognized the contribution of MFIs in alleviating poverty and marked 2005 as the "Year of Microfinance" (Schmidt, 2018). In the following year, Mohammad Yunus, the founding father of modern microfinance, was awarded the Nobel Peace Prize (Schmidt, 2018) in recognition of his contribution to world peace to reduce poverty through microfinance services.

Microfinance is not established to make a profit from the poor. However, it is expected to make enough revenue to cover its operating costs, recover its loans, expand its outreach, and satisfy existing clients' increased demand. The transaction cost of microloans and related services is high compared to the size of the loan. As the service of the MFI expands, the need for additional funds increases. The common sources of funds for NGO MFIs are grants and subsidized loans from local and international development organizations such as NGOs, foundations, the World Bank, and UNDP. All advocating for poverty alleviation in underdeveloped and developing countries. The need for additional funds increases pressure on MFIs to find other sources of funds, including conventional banks and private investors.

Microfinance must maintain financial sustainability and provide socially responsible and affordable financial services to lower-income groups in rural and urban areas. There is a trade-off between financial and social orientation, mostly related to the transaction cost of lending to low-income and marginalized groups (Bos & Millone, 2015). MFIs are expected to balance financial sustainability and social responsibility to provide a financially sustainable service without compromising the economic development mission. Nevertheless, the increasing cost of operating the service, the need for additional sources of funds, and increasing competition from commercial MFIs make it challenging for NGO MFIs to balance their financial and social objectives. It becomes the duty of an NGO MFI to monitor continuously to ensure that it does not drift from its original mission.

The challenge of providing socially oriented microfinance services and the temptation to become commercial make it difficult for MFIs to continue to provide traditional services and may lead the MFI to abandon its mission of serving the poor in favor of serving more wealthy and profitable clients. The tension of competing objectives and the effort to balance the trade-off becomes a pressing

issue for NGO MFIs. The debate continues regarding how MFIs can serve low-income groups and, at the same time, become financially sustainable. MFIs should continue their traditional role of nonprofit orientation to stay true to the mission of providing microfinance services to lower-income groups. Some argue that MFIs cannot continue to provide services without commercializing to attract funds from broader sources, including conventional banks, and earn enough revenue by charging market rates of interest for services.

Advocacy of international development organizations to have self-reliant MFIs and the increase in competition by commercial MFIs attracted by profit (Deb, 2018) make it difficult for NGO MFIs to balance primary objectives. MFIs have a double bottom line objective: to be financially sustainable and to continue to fulfill the original social mission of outreach to low-income, female, and marginalized community clients. This challenge pressures MFIs to find the right business model to achieve both objectives without significantly compromising either. This problem has attracted many researchers to study social and financial goals, sustainability, and efficiency of MFIs (Bos & Millone, 2015).

2.1. Social Enterprise

The MFI uses the concept of social development and micro-enterprise as a tool to provide access to financial services and sustainable development for marginalized communities (Jha, 2016). The MFI, as a hybrid social enterprise, combines economic and social development as a dual objective of its mission. Financial intermediation cannot singlehandedly address the prevalent poverty problem. It should be complemented by social and nonfinancial services that can have an overall impact on society. Social development service includes capacity building, financial literacy, health, and nutrition (Jha, 2016). Nonfinancial services can be handled either by the MFI itself or in collaboration with a partner NGO.

Social enterprises are typical organizations that pursue balancing joint social and financial goals (Battilana, 2018). The two goals are not independent; rather, they form a joint objective that should be satisfied for an organization to be successful and relevant. The goals combine a commercial activity and a social mission (Battilana, 2018). Unlike traditional businesses, the social objectives of social enterprises are not incidental or derivative but are equally important as the profit motive (Battilana, 2018). Commercial activity aims to finance the social mission and limit total dependence on grants and donations.

According to Piketty (as cited in Battilana, 2018), social enterprise is becoming popular as an alternative means to address the issue of social and economic inequalities that unfair business practices and injustices have exacerbated. Thorough understanding of social enterprises is a tool to evaluate the dynamics and challenges of MFIs in balancing the dual objectives of financial sustainability and social responsibility. This study used institutional theory and the essence of social enterprises to study the challenge of balancing financial sustainability and social responsibilities by MFIs in Ethiopia. Financial sustainability, social respon-

sibility, and the MFI business model were analyzed using these concepts to understand how those factors are related and evaluated.

2.2. Institutional Theory

Institutional theory is a school of inquiry that analyzes an organization, its environment, and its response to that environment (Bowring, 2000). According to Meyer and Rowan (as cited in Nebojsa, 2015: p. 441), renowned scholars on the subject, “the institution is a rationalized truth or myth about how certain processes and structures are implemented in society”. According to Jepperson (as cited in Nebojsa, 2015: p. 441), “institutions are socially constructed systems”. The theory emphasizes values, norms, and social interactions as a basis for an organization to find its meaning and legitimacy.

Dart and Mason (as cited in Ko, 2012: p. 251) asserted that the “theory is the most widely used organizational concept to conduct research on social enterprises”. The theory was developed to understand how institutional forces in the socioeconomic environment form an organization (Pinch & Sunley, 2015). This study used institutional theory to understand, explain, and interpret the challenge of balancing financial sustainability and social responsibility of MFIs (Appendix B, Figure B2).

According to Curtis (as cited in Ko, 2012: p. 251), “social enterprises claim their legitimacy in response to the institutional environment from other NFP organizations and private commercial businesses.” The MFI, as a social enterprise, combines the concept of commercial and NFP or socially responsible organizational business practices. The cultural-cognitive pillar of institutional theory asserts that organizations learn and adapt from other businesses and potentially become isomorphic or similar in form. The theory asserts that organizations are not just economic entities guided by economic, market, or financial logic alone.

2.3. Business Model

A business model of the MFI includes a pure profit motive (profit maximization) or an NFP motive (outreach maximization) or a combination of the two (Bos & Millone, 2015). Bos and Millone (2015) categorized the business models of MFIs as purely for profit, not for profit, or “social” for profit. The three models differ in the driving force that motivates the business. Research shows that social entrepreneurship organizations such as MFIs can design an innovative business model that serves an identified target group that needs the intervention (Ault, 2016). The business model should be sustainable enough to achieve the ultimate objective of the MFI: to reduce poverty and bring economic development to low-income groups.

2.4. Financial Sustainability

Overdependence on charity and subsidy to a major and highly rooted problem

such as poverty is not viable (Ault, 2016). Charity and subsidy are uncertain sources of income and cannot be solely relied on. Profitability is essential but there should be a caution not to drift from the organization's mission (Wondimu, 2020). Obsession with financial measurements overshadows the nonfinancial performance of the MFI. The common Key Performance Indicators (KPIs) indicators to measure financial performance of MFIs are profitability and return on assets (Lopatta et al., 2017). Operational Self Sufficiency (OSS) and Financial Self Sufficiency (FSS) are also the most common financial performance measures used in the microfinance sector. They help to measure the extent to which the MFI's main line of income (financial revenue) covers its main line of expense, such as financial expenses, loan loss provision, and operating expenditures. FSS and OSS measure the same thing except that FSS is adjusted for factors such as inflation and subsidy.

2.5. Social Responsibility

The mission of an MFI is manifested in its social responsibility objective. The inherent mission of MFIs is to serve low-income and marginalized members of society, such as women and rural communities.

The complexity of the process, the lack of financial literacy, and the absence of credit history in the area are not business friendly or attractive for conventional banks. Only the social enterprise, such as microfinance, in collaboration with the NFP organization, can provide these kinds of socially responsible activities. The cost of building the capacity and preparing the low-income group for savings and loan service is a long and expensive exercise. Such activity initially needs direct financial grant subsidy and business coordination with more than one stakeholder.

Measuring social performance lacks clarity and is not always cost effective (Siti-Nabiha et al., 2018). The most common and accepted social performance measures are outreach, affordability, and long-term impact in the society that is served. MFIs also use the size of outreach or number of customers, the composition of women borrowers, or average loan balance to measure and monitor social performance of MFIs (Lopatta et al., 2017). The social responsibility of the MFI should be reflected in the poverty level of the client, rural orientation of the operating area, agricultural focus products, composition of women borrowers and historically disadvantaged groups, outreach to unserved areas, and diversification of the loan and savings products (Daniel, 2017).

2.6. Commercialization and NGO MFIs

A growing number of globally recognized NGO MFIs, such as BancoSol of Bolivia, Compartamos of Mexico, and SKS of India, have transformed to commercialization (Ault, 2016). The 2013 Microfinance Information Exchange (MIX) report showed that 60% of MFI borrowers got their loans from commercial sources (Ault, 2016). The National Bank of Ethiopia (NBE) recently issued regu-

lations to encourage and facilitate the commercialization of MFIs. Complete commercialization drives the MFI from social motivation to profit (Deb, 2018). Profit is unquestionably essential but should not be gained at the expense of social objectives. Proper caution should be in place to avoid mission drift (Wondimu, 2020). The industry's saturation by commercial MFIs has increased competition and frozen socially oriented MFIs out of the market.

The core of the argument that supports commercialization of MFIs is the priority of financial sustainability and limited funds (Deb, 2018). The argument emanates from the assertion that MFIs should not depend on uncertain funding sources such as grants and donations. Nevertheless, commercial MFIs are blamed for shifting away from their social responsibility of reaching out to the poor (Beisland et al., 2019). However, transformed MFIs argue that commercialization is not mission drift but expansion (Beisland et al., 2019). The proponents of commercialization contend that the transformation helps MFIs to be profitable and to have better liquidity to expand outreach to underserved communities. The claim is that this shift is not a mission drift but rather cross-subsidization (Bos & Millone, 2015). The MFI subsidizes the cost of microloans from the profit of loans to wealthier clients.

On the contrary, other research indicates that competition and commercialization have a negative effect on outreach and performance of MFIs (Lopatta et al., 2017), creating a profit-seeking behavior (D'Espallier et al., 2017). Commercialization becomes counterproductive to the mission to forego social responsibility. Empirical evidence shows the shift in the mission of the MFI (D'Espallier et al., 2017). Profit orientation is not necessarily against the social mission of an MFI. But the misalignment of priority and excessive profit orientation shift the MFI from its development objective.

This research did not find a study that evaluated the impact of the business model or orientation of an MFI on its performance in general and particularly in Ethiopia. This study was designed to fill gaps in the literature on the influence of the business model or orientation of the MFI to balance financial and social responsibilities.

3. Research Method

The purpose of the research was to test whether NGO MFIs are a better business model than private (commercial) and government-owned MFIs in achieving a balance between financial sustainability and social responsibility. The mean value of the MFIs' financial sustainability and social responsibility was used to compare the three business models. The one-way analysis of variance (ANOVA) using IBM Statistical Package for Social Sciences (IBM SPSS) version 27 tested the hypotheses and indicated rejection of the null hypotheses if $p < 0.05$.

This study used data compiled by the Association of Ethiopian Microfinance Institutions (AEMFI) based on the MFI balance sheets, income statements, and outreach reports. The study used 3 years of data, from 2017 through 2019. AEMFI

did not issue complete financial and operational performance reports of MFIs for the two years prior to 2017 and for the years after 2019. There was not an alternative data source to complete the gap. The researcher initially anticipated to use 3 to 5 years of data but could find complete data for the most recent three years (2017-2019). Although using the most recent data provide the current state of MFIs, additional years of data would have been more informative about the performance of the MFIs.

The financial data are prepared based on nationally accepted accounting standards and practices. Since the financial statements are prepared using similar standards and regulatory requirements, comparing business models is fair and logical. The study used regular operation reports that are prepared per industry standards and central bank requirements to collect data on the breadth and depth of outreach. The data included the number of clients, client composition in terms of gender and urban/rural, and the type and portfolio of loan products provided by the MFIs.

4. Research Questions

Two research questions guided this study:

- 1) Does the business model of an MFI makes a difference in the financial sustainability and social responsibility performance of the MFI?
- 2) Which of the three business models (NGO, government, commercial business models) better balances the financial sustainability and social responsibility of MFIs in Ethiopia?

5. Hypotheses

The following hypotheses were tested:

H_{01} : There are no statistically significant differences in the financial sustainability or social responsibility performances of NGO MFIs, government MFIs, and commercial MFIs business models.

H_{A1} : There are statistically significant differences in the financial sustainability or social responsibility performances of NGO MFIs, government MFIs, and commercial MFIs business models

H_{02} : The NGO MFI business model does not balance financial sustainability and social responsibility better than the government or commercial business model.

H_{A2} : The NGO MFI business model balances financial sustainability and social responsibility better than the government or and commercial business models.

6. Results

The quantitative results showed a significant difference in the social responsibility performance of MFIs but not in the financial sustainability performance, according to the three business models. NGO MFIs and government MFIs performed significantly better than commercial MFIs in terms of average loan per

client and proportion of women borrowers. However, the three business models were not statistically different in the proportion of agricultural loans.

6.1. Financial Sustainability

There were no statistically significant differences in the means of percentage of FSS of the three business models as determined by one-way ANOVA, $F(2, 29) = 1.16$, $p = 0.326$; OSS of the three business models as determined by one-way ANOVA, $F(2, 29) = 2.06$, $p = 0.146$; Return on Asset (ROA) of the three business models as determined by one-way ANOVA, $F(2, 29) = 0.32$, $p = 0.728$; or Return on Equity (ROE) of the three business models as determined by one-way ANOVA, $F(2, 29) = 0.45$, $p = 0.644$ (**Appendix A, Table A1 and Table A2**).

Test results for all financial sustainability performance indicators showed that the differences in the performance of the three business models were not statistically significant, $p > 0.05$. This indicated no statistically significant differences in financial sustainability measurement among the three business models as determined by one-way ANOVA.

The Kruskal-Wallis significance test confirmed the ANOVA results. The results of the significance test as determined by Kruskal-Wallis between a business model grouping were ROA, $H(2) = 1.892$, $p = 0.388$; ROE, $H(2) = 0.786$, $p = 0.675$; OSS, $H(2) = 2.802$, $p = 0.246$; FSS, $H(2) = 1.513$, $p = 0.469$ (**Appendix A, Table A6**). The p values for all financial sustainability measurement were greater than 0.05. Hence, there was not enough evidence to suggest that the medians of financial sustainability performance were unequal among the business models.

6.2. Social Responsibility

There were statistically significant differences in the means of number of women borrowers for the three business models, as determined by one-way ANOVA, $F(2, 29) = 4.75$, $p = 0.01$, $F \text{ Crit} = 3.33$ (**Appendix A, Table A3 and Table A4**). The F value of 4.75 was greater than the $F \text{ Crit}$ value of 3.33 (**Appendix A, Table A4**), so it was concluded that the means of the proportion of women clients were significantly different among models.

There were statistically significant differences in the means of composition of agricultural loan portfolios in the three business models, as determined by one-way ANOVA, $F(2, 28) = 4.39$, $p = 0.02$ (**Appendix A, Table A3 and Table A4**). The F value of 4.39 was greater than the $F \text{ Crit}$ value of 3.34 (**Appendix A, Table A4**), so it was concluded that the means of composition of agricultural loans were significantly different among models.

There were statistically significant differences among the means of average loan balance of the three business models, as determined by one-way ANOVA, $F(2, 29) = 28.34$, $p = 0.00$ (**Appendix A, Table A3 and Table A4**). The F value of 28.34 was greater than the $F \text{ Crit}$ value of 3.33 (**Appendix, Table A4**), so it was concluded that the means were significantly different among models.

The Kruskal-Wallis significance test confirmed the ANOVA results. The results

of the significant test as determined by Kruskal-Wallis between a business model grouping: composition of women clients, $H(2) = 15.485$, $p = 0.000$; composition of agricultural loans, $H(2) = 12.965$, $p = 0.002$; and average loan balance, $H(2) = 11.784$, $p = 0.003$ (**Appendix A, Table A6**). The p values for all social responsibility measurement were less than 0.05. Hence, there was evidence to suggest that the medians of social responsibility performance were unequal among the business models (**Appendix A, Table A6**).

The results of the test of the hypothesis based on one way ANOVA indicated significant differences among the social responsibility performance indicators for the three business models. Hence, H_{01} was rejected, and the alternative hypothesis (H_{A1}) was accepted.

H_{02} : The NGO MFI business model does not balance financial sustainability and social responsibility better than the government or commercial business model.

There were no statistically significant differences in financial sustainability performance among the three business models (**Appendix A, Table A2**) but there were significant differences in social responsibility performance (**Appendix A, Table A4**). Government MFIs had a significantly better social responsibility performance in services to women, one-way ANOVA $F(2, 29) = 4.75$, $p = 0.01$, F Crit = 3.33, and in agriculture loan composition, $F(2, 28) = 4.39$, $p = 0.02$, F Crit = 3.34 (**Appendix A, Table A3** and **Table A4**). NGO MFIs had significantly better social responsibility performance in terms of average loan balance, $F(2, 29) = 28.34$, $p = 0.00$, F Crit = 3.33 (**Appendix A, Table A3** and **Table A4**). F test was conducted to confirm that the variability in group means was larger than the variability of the observation within groups. The test result shows that the F values were sufficiently larger than F Crit for all three social responsibility KPIs. Hence, the means were determined to be significantly different. The Kruskal-Wallis significance test confirmed the ANOVA results (**Appendix A, Table A6**).

6.3. A One-to-One Comparison of Business Models

Post-hoc analysis was used to conduct a one-to-one comparison of the business models. A post hoc analysis using the Games-Howell measure was conducted to compare performance of the business models. Games-Howell analysis is the most common statistical method to conduct multiple comparisons among groups of different sizes. Accordingly, multiple comparison was conducted using post hoc analysis with Games-Howell significance level set of $p < 0.05$.

The post hoc analysis of average loan balance per client showed that the balances between NGO MFI and government MFI business models were not significantly different, $p = 0.537$, but both were better than commercial the balance for MFIs, $p = 0.046$, and $p = 0.037$ respectively (**Appendix A, Table A5**). The results showed that the NGO MFI business model was not better than the government MFI model. Hence, it is not the best model in average loan balance per client (outreach to lower-income groups).

The post hoc analysis of the proportion of women borrowers between NGO MFIs and commercial MFIs indicated that NGO MFIs performed significantly better than commercial MFIs, $p = 0.042$; government MFIs and commercial MFIs were not significantly different, $p = 0.124$; and NGO MFIs and government MFIs were not significantly different, $p = 0.158$ (**Appendix A, Table A5**). A one-to-one comparison of models indicated that the NGO MFI business model was not the best model in terms of proportion of women borrowers, which is a proxy measure of outreach to marginalized groups.

The post hoc analysis showed that the compositions of agricultural loans were not significantly different between NGO MFIs and commercial MFIs, between government MFIs and commercial MFIs, or between NGO MFIs and government MFIs, $p = 0.061$, $p = 0.143$, and $p = 0.162$, respectively (**Appendix A, Table A5**). The analysis indicated that the NGO MFI business model was not the best model to measure agricultural loan performance, which is a proxy measure of outreach to the rural community.

The analysis indicated that both government MFIs and NGO MFIs performed significantly better than commercial MFIs in average loan per client and proportion of women clients. However, the three business models were not statistically different on the measure of agricultural loans. No one business model was better than the others.

NGO MFIs and government MFIs were not statistically different in all three social performance indicators. The analysis indicated that no single business model was best at balancing financial sustainability and social responsibility. Hence, the null hypothesis (H_{02}) was accepted: the NGO MFI business model did not balance financial sustainability and social responsibility better than the government or commercial business model.

6.4. The Impact of Business Model on Social Responsibility and Financial Sustainability

The financial sustainability performance of all three models was evaluated based on KPIs of financial performance or profitability: ROA, ROE, OSS, and FSS. Social responsibility performance was measured based on three inherent missions of an MFI: outreach to rural farmers, women borrowers, and lower-income or poor societies. The corresponding KPIs were composition of agricultural loans, proportion of women borrowers, and the average loan balance per client per Gross National Income (GNI).

6.4.1. Social Responsibility

The data analysis showed that the business model of an MFI makes a difference in measuring the social responsibility performance of MFIs. The statistical mean comparison and significance test showed statistically significant differences in the performance of the three business models (**Appendix A, Table A3 and Table A4**). The p values were 0.01 for composition of women borrowers, 0.02 for composition of agricultural loans, and 0.00 for average loan balance per borrow-

er (**Appendix A, Table A4**). The p value for all three social responsibilities was <0.05 , and thus was deemed to be statistically significant. The F test showed that the variability in group means was larger than the variability of the observation within groups, sufficiently larger than the F-Crit value of 3.33 and 3.34: for proportion of women borrowers 4.75, for composition of agricultural loans 4.39, and for average loan size 28.34 (**Appendix A, Table A4**). Since the F values were sufficiently larger than F Crit, the means were determined to be significantly different.

A one-to-one comparison of models on social responsibility performance using Games-Howell analysis indicated that the NGO MFI and government MFI business models performed better than the commercial model in terms of proportion of women and average loan balance per client. However, the models were statistically not different in the measure of agricultural loan amount.

6.4.2. Financial Sustainability

The one-way ANOVA indicated that the role of the business model on financial sustainability performance of MFIs was not statistically significant, as the p values of the four KPIs were >0.05 . The p values of FSS, OSS, ROA, and ROE were 0.326, 0.146, 0.728, and 0.644, respectively (**Appendix A, Table A2**), all greater than 0.05. The differences in financial sustainability performance of MFIs according to their business models were statistically insignificant. Hence, the business model of an MFI did not make a significant difference in the financial sustainability of the MFIs. The performance measures (profitability) of the models, especially NGO MFIs and government MFIs, were not statistically different.

6.5. Balancing Financial Sustainability and Social Responsibility

The result of one-way ANOVA statistical mean comparison and analysis showed that no single business model balanced financial sustainability and social responsibility better than either of the other two models. The three models were statistically equal in terms of financial sustainability. NGO MFIs and government MFIs were statistically better than commercial MFIs in average loan per client (**Appendix A, Table A5**). NGO MFIs and government MFIs business were more low-income oriented than were commercial MFIs. The commercial MFI business model was not low-income oriented. The average loan per client of commercial MFIs was \$1681, which was double that of per capita GNI of \$850 (**Appendix A, Table A3**). NGO MFIs were statistically better than commercial MFIs in targeting women clients (**Appendix A, Table A5**). The research results showed that NGO MFI and government MFI business models were not statistically different in all financial sustainability and social responsibility performance measures.

7. Summary of Findings

The results of the data analysis showed that a business model of the MFI made a difference in measuring the social responsibility performance but not financial

sustainability. The results complemented the comment by [Alberti and Varon Garrido \(2017\)](#) that the business model of an MFI helps to define and frame the fine line between social responsibility and financial sustainability of hybrid organizations such as MFIs. The three business models that are operating in Ethiopia showed different performance on social responsibility.

The research confirmed the comment by [Young and Kim \(2015\)](#) that institutional resilience of social enterprises such as MFIs is influenced by their form of governance (for profit or not for profit) and organizational slack to maintain mission balance. The choice of a business model determines the identity of the MFI in the industry. NGO and government MFI business models demonstrate social responsibility better than the commercial MFI model. Commercial MFIs are neither more profitable nor more socially responsible than the other two models.

7.1. Financial Sustainability

There were no statistically significant differences in the means of ROA, ROE, OSS, and FSS among the three business models, as determined by one-way ANOVA. The profitability measures for the three business models were not significantly different. One of the arguments in favor of the commercialization of MFIs over NGO MFIs is profitability. Some MFIs have shifted from the traditional mission of poverty alleviation to commercialization, prioritizing profit over mission ([Toindepi, 2016](#)). Some MFIs have focused on market competition to be profitable ([Lopatta et al., 2017](#)). International development organizations pressure the commercialization of MFIs to be self-reliant and to attract profit ([Deb, 2018](#)). The driving force of commercialization is profit. However, this study did not support these claims, as commercial MFIs operating in Ethiopia were neither more financially competitive nor socially responsible than government or NGO MFIs.

Proponents of commercialization argue that profitable MFIs have better liquidity to expand outreach to underserved communities ([Bos & Millone, 2015](#)), claiming that the shift to profitability is not a mission drift but a cross-subsidization. However, this study rejected the notion that commercial MFIs cross-subsidize or expand their social responsibility. The empirical evidence in the case of Ethiopia did not support this claim by [D'Espallier et al. \(2017\)](#) and [Bos and Millone \(2015\)](#). Other empirical evidence has also shown a mission drift by commercial MFIs ([D'Espallier et al., 2017](#)). Results reported in other studies support the current findings that commercialization does not necessarily make the MFI more profitable than NGO or other models of MFIs ([Bos & Millone, 2015](#)).

Empirical data did not support the argument of financial sustainability as a reason for commercialization, at least in the case of Ethiopia. The current study results indicated that the commercial MFIs business model was not more profitable than the NGO or government MFI business model. Considering the recent development in Ethiopia to commercialize the largest MFIs in the country, there

is a potential research area for researchers and practitioners to see the significant change in the financial sustainability of these transformed or commercial MFIs.

7.2. Social Responsibility

The data indicated statistically significant differences in the mean values of NGO MFI, government, and commercial MFIs business models in terms of social responsibility performance. The results were consistent in all three social responsibility performance measurements: average loan size, women clients, and composition of agricultural loans. The results showed the relevance and significance of the difference in a business model in measuring social responsibility performance.

The mission of an MFI is reflected in the costing structure of lending, the socioeconomic level of clients, the type and size of loan disbursed, and outreach (Banks, Brockington, Hulme, & Maitrot, 2019). The business model carries the mission of the MFI. The choice of a model is the choice of a priority. The business model gives the MFI the intention and perspective toward its customers, social role, profitability, and relationship with a broad stakeholder group (Marti, 2018). The results of this study give insight on the comment by Alberti and Varon Garrido (2017) that a business model can be socially responsible and profitable at the same time. The results also support a comment by Davies and Doherty (2019) that a business model can be used as additional input to manage hybrid tensions between parallel objectives.

This study of MFIs operating in Ethiopia showed that the business model has significant importance in evaluating the performance of the MFI in achieving its social mission and its standing in the industry.

7.3. Balancing Financial Sustainability and Social Responsibility

The results did not indicate that commercial MFIs had better financial sustainability than the other two models. According to the one-way ANOVA data analysis, the profitability of commercial MFIs was lower, but the difference was non-significant. The post hoc analysis showed that commercial MFIs' social responsibility performance was weaker than that of either the NGO or government MFI business model.

The differences in the performance of financial sustainability by the three models were not significant. NGO MFIs were not the only business model to balance financial sustainability and social responsibility. The post hoc analysis showed that government and NGO MFI business models did not differ significantly in social responsibility measures. Similarly, based on one-way ANOVA, the two business models' difference in financial sustainability measurement was not significant. Hence, NGO and government MFI business models did not differ significantly in balancing the two primary objectives of MFIs: financial sustainability and social responsibility.

These results of this study showed that the NGO and government MFI business models had a better social responsibility performance than that of commer-

cial MFIs. There was no significant difference in financial sustainability with commercial MFIs. Both the NGO and government MFI business models had a positive ROA and ROE and more than 100% OSS and FSS (**Appendix A, Table A1**), which showed the profitability of the two models.

The comment by Churchill (2019) that emphasized NGO MFIs as the primary business model that balance financial sustainability and social responsibility is not necessarily the case in Ethiopia. This study showed that Ethiopia's NGO and government MFI business models did not differ significantly in social responsibility and financial sustainability measurements. Hence, not only NGO MFIs but also government MFIs balanced social responsibility (values) and financial sustainability (economic efficiency). In comparison, the commercial MFI business model had neither a better social responsibility nor a better financial sustainability performance compared to the other two business models.

The study results indicated that commercial MFIs had a weaker performance in the social responsibility measurement than NGO and government MFI business models. The results also showed that commercialization did not make a significant difference in profitability compared to the other two models.

The NGO and government MFI business models did not significantly balance the performance of both social responsibility and financial sustainability. Hence, any current or future social investor or development agent can use either an NGO or a government MFI as a development partner to reduce poverty in historically vulnerable groups such as women, lower-income groups, and those who live in rural areas.

7.3.1. Social Responsibility

Multiple comparisons were conducted using post hoc analysis, with Games-Howell significance level set at $p < 0.05$. The comparison of the social responsibility performance of NGO MFIs and government MFIs showed that the two models were not different in any of the three social performance KPIs. NGO MFIs and government MFIs performed better than commercial MFIs in targeting low-income groups. NGO MFIs were better than commercial MFIs in targeting women clients. Government and commercial MFIs were not different in the composition of women clients.

7.3.2. One-to-One Comparison

The three business models were not statistically different in measuring financial sustainability. NGO MFIs and government MFIs balanced financial sustainability and social responsibility better than commercial MFIs. Both government and NGO MFIs were socially responsible and financially sustainable. Compared with NGO and government MFI business models, commercial MFIs were less socially oriented.

8. Conclusion

It was hypothesized that the NGO MFI business model balance would better balance the two objectives: financial sustainability and social responsibility. The

study results showed no significant difference between NGO MFI and government MFI business models in balancing financial sustainability and social responsibility. The performance measure of the two models for each objective was not statistically different. Both business models balanced financial sustainability and social responsibility better than commercial MFIs. The results also showed that the business model of an MFI made a difference in the social responsibility performance of MFIs but not in financial sustainability performance.

One of the arguments in favor of commercial MFIs has been profitability, that commercial MFIs would realize better profitability than NGO or government MFIs. However, this study showed that the financial sustainability performance of commercial MFIs was not different from that of the other two models; in fact, it was nonsignificantly lower. Overall, the results of this study showed that MFIs (NGO and government MFIs) can execute their social responsibility without compromising their profitability. This study provides insight into the implications for social, practice, organizational changes, and policy recommendations. The study in general showed that an institution can be both socially responsible and profitable. Hence, as a part of the economic society, the policy decision of MFIs should be based not only on profit and losses but also on response to the needs of society.

The research results can be used as insight by government and nongovernment agencies to identify and enter into partnership with an MFI that balances social responsibility and financial sustainability. The study showed that both NGO and government MFIs balance social responsibility and financial sustainability better than commercial MFIs. Local and international development actors in the country can work with both to advance their livelihood programs for historically marginalized member of society.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Appendix A

Table A1. Results of one-way analysis of variance for financial sustainability: descriptive statistics.

KPI	Business model	n	M	SD	SE
ROA	NGO MFIs	17	0.0582	0.1389	0.0337
	Government MFIs	10	0.050	0.0564	0.0178
	Commercial MFIs	5	0.012	0.0968	0.0433
	Total	32	0.0484	0.1112	0.0196
ROE	NGO MFIs	17	0.1853	0.3548	0.0860
	Government MFIs	10	0.236	0.1764	0.0558
	Commercial MFIs	5	0.082	0.259	0.1158
	Total	32	0.185	0.2919	0.0516
OSS	NGO MFIs	17	1.291	0.4375	0.1061
	Government MFIs	10	1.451	0.2773	0.0877
	Commercial MFIs	5	0.996	0.5267	0.2356
	Total	32	1.295	0.4233	0.0748
FSS	NGO MFIs	17	1.0035	0.3241	0.0786
	Government MFIs	10	1.032	0.1974	0.0624
	Commercial MFIs	5	0.786	0.4377	0.1957
	Total	32	0.9784	0.3122	0.0552

Note. KPI = key performance indicator; ROA = return on assets; ROE = return on equity; FSS = financial self-sufficiency; OSS = operational self-sufficiency; NGO = nongovernmental organization; MFI = microfinance institution.

Table A2. Results of one-way analysis of variance for financial sustainability: significance test.

		X ²	df	M ²	F	p
ROA	Between Groups	0.008	2	0.004	0.321	0.728
	Within Groups	0.375	29	0.013		
	Total	0.383	31			
ROE	Between Groups	0.079	2	0.040	0.447	0.644
	Within Groups	2.562	29	0.088		
	Total	2.641	31			
OSS	Between Groups	0.691	2	0.345	2.059	0.146
	Within Groups	4.864	29	0.168		
	Total	5.554	31			
FSS	Between Groups	0.225	2	0.112	1.164	0.326
	Within Groups	2.797	29	0.096		
	Total	3.022	31			

Note. ROA = return on assets; ROE = return on equity; OSS = operational self-sufficiency; FSS = financial self-sufficiency; NGO = nongovernmental organization; MFI = microfinance institution.

Table A3. Results of one-way analysis of variance for social responsibility: descriptive statistics.

KPI	Business Model	N	M	SD	SE
Women	NGO MFIs	17	150.71	218.92	53.10
	Gov. MFIs	10	1966.10	2809.76	888.52
	Comme. MFIs	5	8.20	15.02	6.72
	Total	32	695.75	1754.00	310.07
Agri. Loan	NGO MFIs	16	95.50	141.71	35.43
	Gov. MFIs	10	2163.50	3232.64	1022.25
	Comme. MFIs	5	6.40	14.31	6.40
	Total	31	748.23	2032.65	365.07
Avg. Loan Bal.	NGO MFIs	17	242.64	159.20	38.61
	Gov. MFIs	10	370.23	348.19	110.11
	Comme. MFIs	5	1680.80	826.31	369.54
	Total	32	507.22	634.79	112.22

Note. KPI = key performance indicator; MFI = microfinance institution; Gov. = government; Comme. = Commercial; Agri. = agricultural; Avg. Loan Bal. = average loan balance.

Table A4. Results of one-way analysis of variance for social responsibility: significance test.

KPI		χ^2	df	M ²	F	P	F Crit
Women	Between Groups	23.6M	2	11.8M	4.7549	0.01	3.33
	Within Groups	71.8M	29	2.5M			
	Total	95.4M	31				
Agri. Loan	Between Groups	29.6M	2	14.8M	4.3918	0.02	3.34
	Within Groups	94.4M	28	3.4M			
	Total	124.0M	30				
Avg. Loan Bal.	Between Groups	8.3M	2	4.1M	28.343	0.00	3.33
	Within Groups	4.2M	29	0.15M			
	Total	12.5M	31				

Note. ROA = return on assets; ROE = return on equity; OSS = operational self-sufficiency; FSS = financial self-sufficiency; NGO = nongovernmental organization; MFI = microfinance institution.

Table A5. Post hoc analysis: Games-Howell multiple comparisons.

Independent Variable		M (I-J)	SE	p	
Average Loan Balance per client	NGO MFIs	Gov. MFIs	-\$127.585	\$116.68	0.537
		Comm. MFIs	-\$1438.153	\$371.54	0.037
	Gov. MFIs	NGO MFIs	\$127.585	\$116.68	0.537
		Comm. MFIs	-\$1310.568	\$385.59	0.046

Continued

Comm. MFIs	NGO MFIs	\$1438.153	\$371.54	0.037
	Gov. MFIs	\$1310.568	\$385.59	0.046
NGO MFIs	Gov. MFIs	-1815.394	890.109	0.158
	Comm. MFIs	142.505*	53.5196	0.042
Women in '00	Gov. MFIs	1815.394	890.109	0.158
	Comm. MFIs	1957.900	888.550	0.124
Comm. MFIs	NGO MFIs	-142.505*	53.5196	0.042
	Gov. MFIs	-1957.900	888.550	0.124
Agricultural Loan Amount in Millions (ETB)	Gov. MFIs	-2068.000	1022.86	0.162
	Comm. MFIs	89.100	36.0007	0.061
	NGO MFIs	2068.000	1022.86	0.162
	Comm. MFIs	2157.100	1022.26	0.143
	NGO MFIs	-89.100	36.0007	0.061
	Gov. MFIs	-2157.100	1022.26	0.143

Note. NGO = nongovernmental organization; MFI = microfinance institution; Gov. = government; Comm. = commercial.

Table A6. Kruskal-Wallis significance test, grouping variable: business model.

	ROA	ROE	OSS	FSS	Women	Agri. Loan	Avg. Loan Bal.
Kruskal-Wallis H	1.892	0.786	2.802	1.513	15.485	12.965	11.784
df	2	2	2	2	2	2	2
Asymp. Sig. (<i>p</i>)	0.388	0.675	0.246	0.469	0.000	0.002	0.003

Note. ROA = return on assets; ROE = return on equity; OSS = operational self-sufficiency; FSS = financial self-sufficiency.

Appendix B

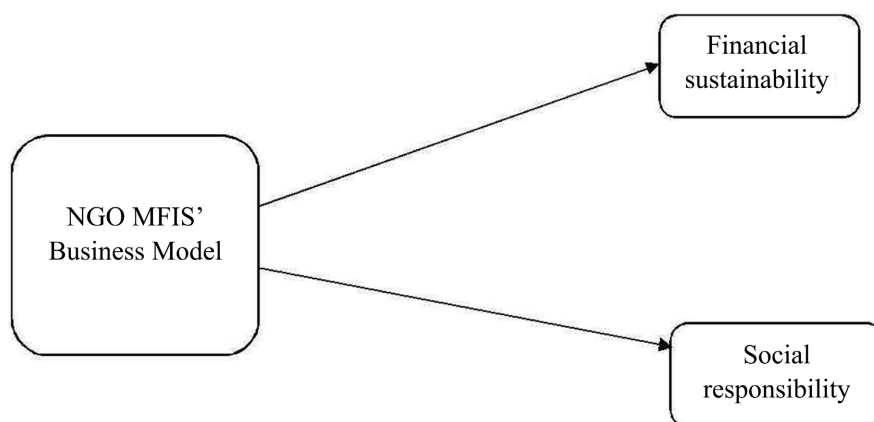


Figure B1. Sustainability matrix. Note: NGO = nongovernmental organization; MFI = microfinance institution.

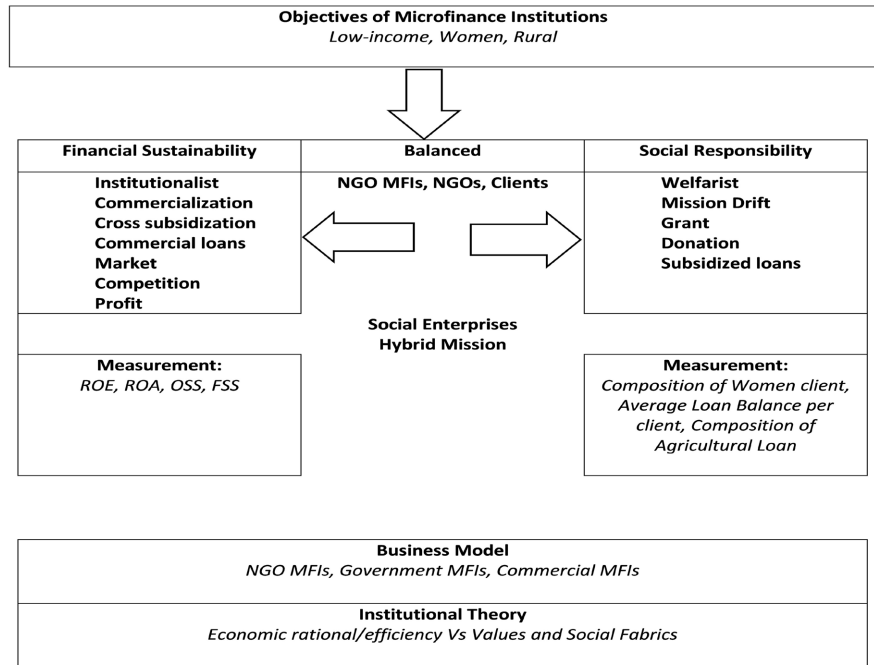


Figure B2. Theoretical framework.