Research Journal of Finance and Accounting
ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)
Vol.8 No.24 2017

Effect of Funding Structure on Financial Sustainability of Micro Finance Banks (MFBS) in Nasarawa State of Nigeria.

Aza, Ibrahim Eyigege
Department of Accounting, Federal polytechnic, Nasarawa, Nasarawa State
E-mail: ibrahimeyigege@gmail.com
GSM: 08035138578

Abstract
In recent years there has been increasing internal and external pressure for the microfinance institutions to decrease dependence on subsidies or grant funding by international organization designed to support microfinance institutions. The shrinking resources base for donor fund to support the increasing demand for grant and soft loans implies that microfinance institutions will eventually have to support themselves hence the need to determine alternative sources of fund and how it affect their financial sustainability. This study therefore aim to examine the effect of funding structure on financial sustainability of MFBs in Nasarawa State using a sample of four MFBs from the total population of seven in the state. The study uses secondary data sourced from the certified annual reports of the banks. The data for the study were analyzed using OLS and fixed effect regression and it was observed that there is no statistical evidence to suggest that funding structure has significant effect on financial sustainability of MFBs in Nasarawa State. The study therefore recommends that the banks should optimize funding through mixed of loan deposit and debt as against only equity finance.

Keywords: financial sustainability, leverage, loan deposit, equity finance

1. Introduction

For a company to exist and operate it must be able to identify its source of funding, that is, its capital structure. These sources of fund can be from equity finance or debt finance. The optimal combination of these sources of finance and how they affect the operation of a business still remains a controversial issue.

The recent financial crisis characterized by wake of banking collapse and the ensuing government intervention and institutional restructuring efforts through bailout funding and aids leads to the salient question of financial structure (Bogan, 2012). What is the best mix of debt, equity and grant funding that will ensure solvency and self-sufficiency? The question of optimal capital structure for lending institutions, particularly, ones with access to grant funding is an open and weighty question (Bogan, 2012).

Microfinance is the provision of financial services to the poor and low income households and it is described as banking for the poor. Microfinance program is therefore the provision of loans, savings and other financial services to low income earners and poor people for use in small businesses as a source of poverty alleviation (Mejeha&Nwachukwu, 2008).

In recent years there has been increasing internal and external pressure for the microfinance institutions to decrease dependence on subsidies or grant funding by international organization designed to support microfinance institutions, help them to obtain equity financing, debt financing and other commercial funding instruments (Bogan, 2007). The shrinking resources base for donor fund to support the increasing demand for grant and soft loans implies that microfinance institutions will eventually have to support themselves (Ledgerwood, 1999) in (Bassem, 2009). However, their sustainability will focus on governance structures within the industry (Bassem, 2009).

Performance of microfinance banks is a means through which its viability and sustainability can be achieved. According to Muriu (2011), profitability, at the micro level is a prerequisite to a competitive microfinance industry and the cheapest source of capital.

One of the important issues that have recently captured the attention of many researchers is the financial sustainability of microfinance institutions due to its importance in the livelihood of microfinance institutions. It is therefore a necessary condition for institutional sustainability. Nyamsogoro (2010) opines that it is better not to have microfinance institutions than having unsustainable one. This shows how indispensable the sustainability

of microfinance institution is and so, studying factors relating to sustainability of microfinance institution and how they can become sustainable is a necessity.

Several studies have been conducted in various countries on the issue of sustainability and profitability of microfinance institutions and there are a lot of inconsistencies in their findings. In Nigeria, such studies include the study of Anyanwu (2004), AchaIkechukwu (2012), Adekunle (2011) Muhammed and Hassan (2008) and Mejeha and Nwachukwu (2008). A major criticism of these studies conducted in Nigeria is that some of the studies were exploratory as they only try to explore the challenges and prospect for microfinance sustainability. Subsequently, the empirical studies conducted on effect of equity capital and debt capital on profitability of MFIs used primary sources data which findings cannot be heavily relied upon due to its subjectivity. This study is therefore unique from existing studies as it tries to source for documentary evidence which are certified by professional auditors to conduct the study. This is based on the fact that documentary source of data from MFIs are hardly accessible. In the light of the foregoing, this study was able to have access to certified financial statements of microfinance banks in Nasarawa State by which reliable and objective findings can be achieved.

Hence, this study is designed to examine the relationship between funding structure and financial self-sufficiency and sustainability of microfinance banks in Nasarawa State of Nigeria.

2. Literature Review

2.1 Concept of microfinance

Scholars tend to give varying definitions of microfinance which seems different from one another, though capture similar interpretations. According to Hartarska (2005) microfinance is the provision of small scale financial services to low income or unbanked people. Microfinance entails series of financial services in form of deposit money transfer and insurance to the poor and low income earners. According to Kinde (2012) Microfinance institutions are considered as a tool for poverty alleviation through improving access to finance and financial services. According to Bogan (2007) Microfinance refers to an array of financial services that include credit savings and insurance while microcredit is the provision of credit which is usually used as capital for small business developments.

2.2 Concept of financial sustainability

Definition of Sustainability has received several interpretations and according to Tehulu (2013) financial self-sufficiency measures whether an institution earns enough revenue from loans to cover for operating expenses, financing costs, provision for loan losses and cost of capital which is excluded from the OSS.

Kinde (2012) posits that financial sustainability indicate the ability of MFIs to cover all its operating costs and cost of capital without depending on subsidies. It is expected that for sustainable poverty alleviation, the MFBs should be sustainable themselves as unsustainable MFBs will not help the poor.

Thapa et al (1992) in Kinde (2012) admits that financial sustainability implies the ability of MFBs to cover all its costs from its own generated income from its operations without depending on external support or subsidy.

Dunford (2003) in Kinde 2012 defines also the financial sustainability as the ability to keep on going towards microfinance objective without continued donor support. The definition entails the ability to depend on self-operation and the possibility of making profit out of the microfinance operations.

Microfinance bank is financially self-sufficient when they can cover from their own generated income both operating and financing costs and other form of subsidy valued at market prices which implies that a loss making microfinance bank cannot be classified as financially sustainable whereas a profit making microfinance bank whose profitability is ascertained after covering some of the operating costs by subsidized resources or funds will not also be considered as financially sustainable(Kinde, 2012).

Tucker and Miles (2004) defined sustainability as a program capacity to remain financially viable in the absence of domestic subsidies or foreign support. Sustainability therefore includes generating sufficient profit to cover expenses while eliminating all subsidies, even those less obvious subsidies such as loans made in hard currency with repayment in local currency.

2.3 Concept of Funding Structure

The funding structure of a firm relates to the mix of debt capital and equity capital the firm uses in its operation. Brealy and Myers (2003) in Abor (2005) declared that the choice of funding structure is a marketing problem. They state that firm can issue dozens of distinct securities in countless combinations, but it attempts to find the particular combination that maximizes the market value and the optimal funding structure is the one that maximizes the market of the firms' outstanding shares.

Nyamsogoro (2010) identified that equity is a relatively cheaper source of financing and therefore improves financial sustainability. He states that how the capital has been structured affect the financial sustainability, having different sources of capital do not improve financial sustainability. The various sources include shares, deposits, loans and savings, and several studies have been conducted to explain whether the funding structure determines the sustainability of microfinance banks.

Kyereboah (2007) as mentioned in Kinde (2012) found that highly leveraged microfinance bank have higher ability to deal with moral harzards and adverse selection than their counterparts with lower leverage ratios. The combination of various sources of funding could affect profitability and therefore sustainability of microfinance banks.

According to Woolcock (1999) in Tucker and Miles (2004) financial sustainability is a program capacity to remain financially viable in the presence of domestic subsidies or foreign support. Financial sustainability includes generating sufficient profit to cover expenses while eliminating all subsidies, such as loans made in hard currency with repayment in local currency.

2.4 Funding Structure and Financial Sustainability.

Nyamsogoro (2010) empirically examined the financial sustainability in rural microfinance institutions in Tanzania. The study noted that how capital of micro financial institution is structured determines the performance of the institution. However, he noted that having different sources of capital do not improve performance. The findings also revealed that equity financing is relatively cheaper option and as such improves the performance of micro finance institutions.

Tehulu (2013) identified the factor that determines east Africa microfinance institutions financial sustainability using unbalanced panel data collected from 23 microfinance institutions and the regression result reveals that MFIs financial sustainability is positively and significantly driven by loan intensity (loan/total asset).

Nyamsogoro (2010) admits that having different sources of capital do not improve financial sustainability although how the capital has been structured affects the financial sustainability, but identified that equity is a relatively cheaper source of financing and therefore improves financial sustainability.

Waweru and Wanyoike (2016) examined the effect of equity capital on profitability of MFIs adopting a cross-sectional survey research design on a population of 171 employees and a sample size of 64 respondents working with MFIs in Nakuru town. The study found that equity capital did not significantly influence profitability of MFIs.

Lislevand (2012) analyzed the effect of capital structure on performance of microfinance institutions. Cross-sectional data from 403 MFIs in 73 countries was used. The measures of capital structure were debt to equity ratio and debt to assets ratio while cost of funds and return on assets were used to measure performance. It was established that most of the surveyed MFIs were less financed through equity. Indeed, it was noted that the institutions used approximately a quarter of debt capital as equity in their capital structure. The study however noted that the proportion of equity to debt in the MFIs was not significant in MFIs performance.

Martin-Oliver, Ruanoand Salas-Fuma (2012) conducted an empirical investigation of the effect of equity capital on interest rate and demand for credit. The study particularly examined the effect of imposing higher capital requirements on demand for credit and interest rate among Spanish banks. The study found that an increase by one percent of equity capital ratio increased bank lending rates by a 4.2 basis points. Further, the study noted that increase in the cost of funds for banks as a result of the increase in a percent of equity capital ratio led to a fall of about 0.8% in the demand for credit. It was suggested that higher equity capital requirements for banks resulted in increase in social costs as the banks adjust to the new standards.

Zhu and Wang (2013) examined Equity financing constraints and corporate capital structure. The study purposed to establish how uncertainty of equity financing as a result of equity financing regulations in emerging capital market affect company's capital structure decisions. It is noted that the value of the firm decreases with the uncertainty of equity financing. This is ascribed to the relationship between the firm's future cash and the

financing policies. It was suggested that uncertainty of equity financing affects the decision on optimal capital structure. Lower optimal capital structure would be attained in case of greater uncertainty of equity financing.

Abor (2005) collected data from both the small and medium scale enterprises of Ghana and the analysis established that an increase in short term debt ratio significantly positively impacts on the returns on equity (ROE). However, a negative relationship between the ratio of long term debt to total assets and ROE was found. With respect to the relationship between total debt and return rates, the result shows a significantly positive association between the ratio of total debt to total assets and ROE.

Abrar and Javaid (2016) examined the effect of customer deposit on profitability of microfinance institutions. The study utilizes cross-sectional (unbalanced) panel data employing the random effect model with result indicating that deposit enhances the level of debt in ones capital structuring thereby complementing the firms' overall profitability. Meanwhile, deposit to asset ratio is comparatively highly relevant for the micro financing firms which mobilize the deposits. A lower ratio allows the micro financing firms to fund their assets directly from the deposit base

2.5 Modigliani and Miller Capital Structure Theory

Modigliani and Miller (1958) propounded a theory that assumes a perfect market and states that the value the company is independent of its capital structure. Irrespective of the funding structure, the value of firm does not depend on funding structure hence the funding structure is irrelevant. The theory states further that the firm value is totally independent of how the firm finances its investment activities and pays out dividends. The theory propounded by MM (1958) shows conditions under which capital structure is irrelevant and the following assumptions were made. A world without taxes, no bankruptcy costs, no transaction costs, no growth. All earnings were paid out as dividends and all individuals in the market are homogenous. There are basis for examining real world reasons why capital structure is relevant. This includes bankruptcy costs, taxes and information asymmetry. By relaxing the assumption made in MM (1958), several theories came up attempting to address the imperfections. They include trade-off theory, pecking order theory, agency cost theory etc (Orua, 2009). MM (1963) introduced the trade-off theory. Trade-off theory allows bankruptcy cost to exist and stated that there was an advantage to financing with debt (namely the tax benefit of debts) and there was a cost of financing with debt (the bankruptcy cost of debt). The theorists further argue that marginal benefit of further increases in debt declined as debt increases while marginal cost increased so that a firm that was optimizing its overall value would focus on the trade-off when choosing how much debt and equity to use for financing. This theory explained D/E ratios between industries but did not explain differences within the industry (Orua, 2009). MM (1963) reviewed their earlier position by incorporating tax benefit as determinants of the capital structure of firms. The key feature of taxation is that interest is a tax deductible expense. A firm that pays taxes receives a partially offsetting interest "tax shield" in the form of lower taxes paid. Therefore as Modigliani and Miller (1963) propose, firms should use as much debt capital as possible in order to maximize their value (Abor, 2005)

2.6 Life Cycle Theory

Generally the life cycle theory argues that the sources of financing are linked to the stages of MFI development. Donor grants and soft loans comprise the majority of the funding in the
formative stages of the organization. As the MFI matures, private debt capital becomes available, but the debt structures have restrictive covenants or guarantees. In the last stage of MFI evolution, traditional equity financing becomes available. According to Fehr & Hishigsuren (2004) as depicted in Bogan (2012) Current research places the evolution of MFI funding sources within the context of an institutional life cycle theory of MFI development (de Sousa-Shields, 2004) in (Bogan, 2012). According to this framework of analysis, most MFIs start out as NGOs with a social vision, funding operations with grants and concessional loans from donors and international financial institutions that effectively serve as the primary sources of risk capital for the microfinance sector. Thus, the literature on microfinance devotes considerable attention to this process of "NGO transformation" as a life cycle model outlining the evolution of a microfinance institution (Helms, 2006) as captured in Bogan (2012). Generally, the life cycle theory posits that the sources of financing are linked to the stages of MFIs development.

2.7 Profit –Incentive Theory

According to Bogan (2012) In contrast to the life cycle theory, the profit-incentive theory posits that MFI use of commercial funding sources (at any stage of development) will enable MFIs to meet the" microfinance promise." Reliance on commercial funding is beneficial along two dimensions: outreach and efficiency. Since

donor funds are limited in amount, reliance on donor funding limits the ability of MFIs to expand to meet rising demand for services. There is also a question as to whether reliance on donor funds allows MFIs to avoid pressures to operate efficiently. Commercially funded MFIs respond to the profit incentive, working to increase revenues and decrease expenses so that they can have revenues sufficient to cover all operating expenses. MFIs with access to donor funds may not respond to these pressures to operate efficiently or may deliberately choose outreach over efficiency by serving poorer or rural clients with higher delivery costs (Armendáriz de Aghion& Morduch, 2005) as portrayed in Bogan (2012).

3. Methodology

This study adopts a descriptive research design using panel data covering seven years (2010 - 2016). The population of the study consist of all micro finance institutions in Nasarawa state that are registered with CBN and the sample of the study totaling four were obtained through filtering thereby accepting as sample those MFBs that their annual financial statements are certified by a professional auditor.

3.1 Population

Population of the study comprises the seven registered MFBs in Nasarawa State as follows;

1. Amba MFB Ltd, Lafia Nasarawa State
2. FPNMFB Ltd, Nasarawa “
3. Josad MFB Ltd, Masaka “
4. Keffi MFB Ltd, Keffi “
5. Nasarawa MFB Ltd, Nasarawa “
6. Sky-line MFB Ltd, Karu “
7. Waiter MFB Ltd, Mararaba “

3.2 Sampled MFBs

1. Amba MFB Ltd, Lafia
2. FPNMFB Ltd Nasarawa
3. Keffi MFB Ltd, Keffi
4. Nasarawa MFB Ltd, Nasarawa.

The study therefore employ the use of OLS regression and fixed effect regression analysis to examine the effect of independent variables (customer deposit proxied by DTA, debt capital proxied by DTE and equity capital proxied by ETA) on the dependent variables (Financial Sustainability proxied by FSS) of MFBs in Nasarawa State.

3.3 Model Specifications

$FSS = \beta_0 + \beta_1 dta + \beta_2 dte + \beta_3 eta + \varepsilon$

Where;

FSS = Financial Self Sufficiency

Dta = Deposits to total assets

Dte = Debt to Equity

Eta = Equity to total assets

β_0 = constant

ε = error term

4. Result and Discussion

Descriptive Statistics for FSS, DTA, DTE and ETA

Table 1.0

Variable	Obs	Mean	Std. Dev.	Min	Max
fss	28	1.087143	.5044165	.05	2.11
dta	28	.6257143	.9690294	0	5.44
dte	28	1.240357	.9580941	.11	3.62
eta	28	.4028571	.1377291	.17	.7

Source: Researcher's computation using STATA V.13

Table 1.0 presents Descriptive Statistics of the variables of the study. It describes the Mean, Standard Deviation, minimum and maximum value. The average value of financial sustainability (FSS) recorded in the period of the study is 1.087 and the Maximum reached is 2.11. In the case of deposit to total asset (DTA), the average value stood at 0.626 and the Maximum reached is 5.44. Debt to equity (DTE) average stood at 1.240 and the Maximum reached is 3.62. In the case of Equity to total asset (ETA), the average value stood at 0.403 and the Maximum reached is 0.7.

Correlation Analysis

Table 2.0: Correlation Result

	fss	dta	dte	eta
fss	1.0000			
dta	0.0964	1.0000		
dte	-0.0118	-0.1125	1.0000	
eta	-0.2360	0.0927	-0.4729	1.0000

Source: Researcher's computation using STATA V.13

The correlation result indicates that there is a positive association between deposit to total asset (DTA) and financial sustainability of MFBs in Nasarawa State. It is also found that, debt to equity (DTE) is negatively related to financial sustainability of MFBs in Nasarawa State. This is similar to that of equity to total asset (ETA) and financial sustainability of MFBs in Nasarawa State where negatively correlations was also found. The respective cases indicate the significance of the relationship given by 1.0000. It is also indicated in the results that the explanatory variables are not highly correlated.

Regression Analysis

Table 3.0: Regression Result

fss	**OLS**				**Fixed Effect**			
Ind var.	**Coefficient**	**Std error**	**T**	**p>/t/**	**Coefficient**	**Std error**	**T**	**p>/t/**
Constant	1.616501	.4303576	3.76	.001	.971931	.4768558	2.04	.054
dta	.567042	.1022783	.55	0.584	.1161996	.0925911	1.25	.223
dte	-.0786059	.1168966	-.67	.508	.1347036	.1032274	1.30	.206
eta	-1.160062	.8115104	-1.43	.166	-.3092322	1.062375	-.29	.774
F **P- Value** **R^2** **Wald Chi^2** **P- Value**	0.76 0.5262 0.0870				 .4277			
R Squared:								
Within					.1212			
Between					.0161			
Overall					.0117			

Source: Researcher's computation using STATA V.13

Table 3 shows the results of both the OLS and fixed Effect regression. The OLS shows the F-Value of 0.76 and its P-Value is 0.5262 which means that the overall model is fit. Further, both the OLS and the Random Effect showed the value of R^2 as 0.0870 which is the multiple coefficient of determination that gives the proportion or percentage of the total variation in the dependent variable explained by the explanatory variables jointly. Hence, it signifies that approximately only 9% of total variation in financial sustainability (FSS) of MFBs in Nasarawa state is caused by funding structure (dta, dte & eta).

The regression results as shown in table 3 indicate that deposit to total asset (dta) in both the OLS and Fixed Effect regressions has positive effect on financial sustainability (fss) but the effect is not statistically significant at 5%. This implies that as the deposit to total asset increases, financial sustainability improves. This finding corroborate with the findings of Tehulu (2013).

In addition, the results in both the OLS and Fixed Effect regressions indicate that equity to total asset (eta) has a negative but insignificant effect on financial sustainability of MFBs which is consistent with the finding of Waweru and Wanyoike (2016). While the fixed regression indicates that debt to equity (dta) has a positive but insignificant relationship with financial sustainability. This is because the P-value (0.206) is greater than significant level of 0.05.

Hausman Specification Test was carried out to decide between fixed or random effect models. An important assumption of the fixed effect model is that those time-invariant characteristics are unique to the individual firms and should not be correlated with other firm's characteristics (Samaila, 2014). The result of the Hausman test for the model revealed that it is not correlated because of the Chi-square probability of 0.0001 which is significant and hence fixed effect was chosen for the interpretation.

Therefore fixed regression line fss = .971931+ .1161996dta +.1347036dte -.3092322eta indicates that the financial sustainability is increased as deposit to total asset (dta) and debt to equity increases and decreases as equity to total asset (eta) increase but there is no statistical evidence to suggest that the effect is significant since their P-value are greater than the significant level of 0.05. These findings are consistent with the findings of Lislevand (2012), Tehulu (2013) and Waweru and Wanyoike (2016) but contradict the finding of Nyamsogoro (2010).

Post residual Diagnostic Test
Multicollinearity Test
Table 4.0: Variance Inflation Factor

Variable	VIF	1/VIF
dte	1.30	0.771626
eta	1.29	0.774796
dta	1.01	0.985339
Mean VIF	1.20	

Source: Researcher's computation using STATA V.13

The VIF for dta, dte and eta are 1.01, 1.30& 1.29 respectively. This indicates that, the VIFs are less than 10 respectively. Thus, the study concludes that there is no problem of multicollinearity. That multicollinearity exists only when the VIF is greater than 10.

Heteroskedasticity Test

Table 5.0: Heteroskedasticity

```
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of fss

         chi2(1)      =     0.01
         Prob > chi2  =   0.9284
```

Source: Researcher's computation using STATA V.13

The Breusch Pegan/ Cook-Weisberg Test for Heteroskedasticity on dta, dte and eta given the Chi2 Prob of 0.9284, indicates that the data are homokesdasticity. Thus the p-value of 0.9284 which is greater than 0.05 significant levels makes the study to accept the hypothesis that the residuals are not heteroskedasticity but homokesdasticity and is desirable.

Conclusion

This study has examined the effect of funding structure on financial self-sufficiency and sustainability of MFBs in Nasarawa State. The study has provided empirical evidence that there is no statistical evidence to suggest that funding structure has significant effect on the financial sustainability of MFBs in Nasarawa State.

Recommendation

Base on the findings from the study where the study observes that loan deposit (dta) and leverage (dte) have positive but insignificant effect on financial sustainability; it is therefore recommended that MFBs should try to maximize such avenue in the funding of their operations than using only equity finance which has insignificant negative effect.

REFERENCES

Abor, J. (2005). The effect of capital structure on profitability: an empirical analysis of listed firms in Ghana. *The journal of risk finance*, *6*(5), 438-445.

Abrar, A., &Javaid, A. Y. (2016). The Impact of Capital Structure on the Profitability of Microfinance Institutions.*South Asian Journal of Management Sciences (SAJMS), Iqra University*, *10*(1), 21-37.

AchaIkechukwu, A. (2012). Microfinance banking in Nigeria: Problems and prospects. International Journal of Finance and Accounting, 1(5), 106-111.

Adekunle, B. (2011). Determinants of microenterprise performance in Nigeria.*International Small Business Journal*, 0266242610369751.

Ahlin, C., Lin, J., &Maio, M. (2011). Where does microfinance flourish? Microfinance institution performance in macroeconomic context. *Journal of Development Economics*, *95*(2), 105-120

Akhtar, M. F., Ali, K., &Sadaqat, S. (2011). Factor Influencing the Profitability of Conventional

Banks of Pakistan.*International Research Journal of Finance and Economics*, *66*, 1450-2887.

Anyanwu, C. M. (2004, November). Microfinance institutions in Nigeria: policy, practice and potentials. In *G24 Workshop on "Constraints to Growth in Sub Saharan Africa," Pretoria, South Africa*.

Bassem, B. S. (2009). Governance and performance of microfinance institutions in Mediterranean countries.*Journal of Business Economics and Management*, *10*(1), 31-43.

Bhatt, N., & Tang, S. Y. (2001). Delivering microfinance in developing countries: Controversies and policy perspectives. *Policy studies journal*, *29*(2), 319-333.

Bogan, V. L. (2012). Capital structure and sustainability: An empirical study of microfinance institutions. *Review of Economics and Statistics*, *94*(4), 1045-1058.

Bogan, V., Johnson, W., & Mhlanga, N. (2007). Does Capital Structure affect the financial sustainability of MicroFinance Institutions. *Retrieved on*, *7*(04), 2013.

Brau, J. C., &Woller, G. M. (2004). Microfinance: A comprehensive review of the existing literature. *The Journal of Entrepreneurial Finance*, *9*(1), 1.

Cheng, E. (2007). The demand for microcredit as a determinant for microfinance outreach-evidence from china. *Savings and Development*, 307-334.

Christen, R., & Cook, T. (2001). Commercialization and Mission Drift: The Transformation of Microfinance in Latin America: CGAP.

Coetzee, G. (2003). Innovative approaches to delivering microfinance services: The case of Capitec Bank.

Epstein, M. J., & Crane, C. A. (2005, October). Alleviating global poverty through microfinance: factors and measures of financial, economic, and social performance. In *Documentopresentadoen la conferenciasobrepobrezamundial organizadapor la Harvard Business School, Boston, MA* (Vol. 1).

Ferro, N. (2005). Value through diversity: microfinance and Islamic finance and global banking.

Gallardo, J. (2002). A framework for regulating microfinance institutions: The experience in Ghana and the Philippines.

Gonzalez, A. (2007). Efficiency drivers of microfinance institutions (MFIs): The case of operating costs.

Gumel, G. B. (2011). Micro finance institutions in Nigeria outreach and sustainability: Questionnaire survey findings.*International Journal of Business and Social Science*, *2*(9).

Hartarska, V. (2005). Governance and performance of microfinance institutions in Central and Eastern Europe and the newly independent states.*World development*, *33*(10), 1627-1643.

Hartarska, V., &Nadolnyak, D. (2007). Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence.*Applied economics*, *39*(10), 1207-1222.

Hartungi, R. (2007). Understanding the success factors of micro-finance institution in a developing country. *International Journal of Social Economics*, *34*(6), 388-401.

Hermes, N., Lensink, R., &Meesters, A. (2011). Outreach and efficiency of microfinance institutions. *World Development*, *39*(6), 938-948.

Hudon, M., &Traca, D. (2011). On the efficiency effects of subsidies in microfinance: An empirical inquiry. *World development*, *39*(6), 966-973.

Ibrahim, S. N., Kamaruddin, N. I., &Daud, S.(2016) Assessing the Determinants of Profitability Performance on Islamic Microfinance in Malaysia.

Javaid, S. (2011).*Determinants of bank profitability in Pakistan: Internal factor analysis* (Doctoral dissertation, Department of Management Sciences. Correspondence concerning this article should be addressed to Khalid Zaman, Department of Management Sciences, COMSATS Institute of Information Technology, Abbottabad, Pakistan).

Kinde, B. A. (2012). Financial sustainability of microfinance institutions (MFIs) in Ethiopia. *European Journal of Business and Management*, *4*(15), 1-10.

Lafourcade, A. L., Isern, J., Mwangi, P., & Brown, M. (2005).Overview of the outreach and financial performance of microfinance institutions in Africa.*Microfinance Information eXchange, Washington, DC. http://www. mixmarket.*

org/medialibrary/mixmarket/Africa_Data_Study. pdf.
Lashley, J. G. (2004). Microfinance and Poverty Alleviateion in the Caribbean: A Strategic Overview.*Journal of Microfinance/ESR Review*, *6*(1), 83-94.
Lapenu, C., & Zeller, M. (2001). Distribution, growth, and performance of microfinance institutions in Africa, Asia, and Latin America.
Lislevand, C. J. (2012). *The effect of capital structure on microfinance institutions performance* (Master's thesis, UniversitetetiAgder; University of Agder).
Littlefield, E., Morduch, J., &Hashemi, S. (2003). Is microfinance an effective strategy to reach the Millennium Development Goals?. *Focus note*, *24*(2003), 1-11.
Martín-Oliver, A., Ruano, S., & Salas-Fumás, V. (2012). Effects of equity capital on the interest rate and the demand for credit: Empirical evidence from Spanish banks.
Mejeha, R. O., &Nwachukwu, I. N. (2008).Microfinance institutions in Nigeria.
Molenaar, K. (2009). Microfinance, its concepts and development, lessons to draw for Europe. *European Microfinance Network*.
Morduch, J. (1999). The microfinance promise.*Journal of economic literature*, *37*(4), 1569-1614
Muhammed, A. D., & Hasan, Z. (2008). Microfinance in Nigeria and the prospects of introducing its Islamic version there in the light of selected Muslim countries' experience.
Muriu, P. W. (2011). *Microfinance profitability* (Doctoral dissertation, University of Birmingham).
Muriu, P. (2011). Microfinance Profitability: Does financing choice matter. *Np*, *May*.
Nawaz, A. (2010). Issues in subsidies and sustainability of microfinance: An empirical investigation. *Centre Emile Bernhiem (CEB). Working Paper*, (10/010).
Nyamsogoro, G. D. (2010). *Financial sustainability of rural microfinance institutions (MFIs) in Tanzania* (Doctoral dissertation, University of Greenwich).
Olivares-Polanco, F. (2005). Commercializing microfinance and deepening outreach? Empirical evidence from Latin America. *ESR Review*, *7*(2), 47.
Orua, E. A. (2009). *The relationship between capital structure and financial performance of Microfinance Institutions in Kenya* (Doctoral dissertation University of Nairobi).
Oteng-Abayie, E. F., Amanor, K., &Frimpong, J. M. (2011). The measurement and determinants of economic efficiency of microfinance institutions in Ghana: A
stochastic frontier approach. *African Review of Economics and Finance*, *2*(2), 149-166.
Qin, X., & Dickson, P. (2012). Commercial Banks Profitability Position: The Case of Tanzania. *International Journal of Business and Management*, *7*(13), 136.
deCrombrugghe, A., Tenikue, M., &Sureda, J. (2008). Performance analysis for a sample of microfinance institutions in India. *Annals of Public and Cooperative Economics*, *79*(2), 269-299.
Quayes, S. (2012). Depth of outreach and financial sustainability of microfinance institutions.*Applied Economics*, *44*(26), 3421-3433.
Rock, R., Otero, M., & Saltzman, S. (1998). *Principles and practices of microfinance governance*. Development Alternatives, Incorporated.
Sources, W., & Christen, R. (2001). Commercialization and Mission Drift: The Transformation of Microfinance in Latin America.
Tehulu, T. A. (2013). Determinants of financial sustainability of microfinance institutions in East Africa. *European Journal of Business and Management*, *5*(17), 152-158.
Tucker, M., & Miles, G. (2004). Financial performance of microfinance institutions: A comparison to performance of regional commercial banks by geographic regions. *Journal of Microfinance/ESR Review*, *6*(1), 41-54.
Van Greuning, H., Gallardo, J., & Randhawa, B. (1998). A framework for regulating microfinance institutions.
Waweru, M. W., &Wanyoike, D.(2016). Effect of capital structure on profitability of microfinance institutions in Nakuru town,Kenya.
Wang, Z., & Zhu, W. (2013). Equity financing constraints and corporate capital structure: a model. *China Finance Review International*, *3*(4), 322-339