

# Effect of Equity Financing on Financial Performance of Deposit Taking Microfinance Institutions in Kenya

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## Abstract

A firm's financing structure has great significance in financing and investment choice, because of its effect on profitability, with risk levels the firm encounters because of its dependence and leverage intensifying. Nowadays, more and more entities from the developed world employ different sources such as equity financing to finance its operations when they need to expand their firm size or reinvest to gain more profits. Despite the availability of equity and other financing sources, the performance of DTMI in Kenya has continued to deteriorate. This study thus sought to establish the influence of equity financing on financial performance of DTMI in Kenya. This study employed a descriptive research design. The study carried out a census of the 13 DTMI in Kenya as at 31st December 2018. The study embraced secondary data that was collected using a data collection sheet for a period of five years (2014-2018). For the purpose of data analysis, the study employed both descriptive and inferential statistics analysis methods using SPSS version 23. Under descriptive statistics, central tendency measures were employed. These included: mean, maximum, minimum and standard deviation among others. Inferential statistical analysis was used in predicting the relationship existing between equity financing and financial performance. The findings of the study indicate that equity financing has a positive significant influence on financial performance of DTMI in Kenya. The study therefore recommends management of the DTMI to increase their equity financing by selling their shares to potential shareholders and investors.

**Key words:** Equity, Financial performance, financing structure

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## Background of the Study

The firm structure of financing is an important decision for all deposit taking microfinances. The way microfinances determine financing needs is key in ensuring owners' wealth is maximized and firms' productivity is enhanced as whole. As of the connection, financial composition choice has considerable influence on banks' capacity of dealing with the competitive environment (Lislevad, 2012). Better financing structure decision making amongst MFIs minimizes risk, maximizes financial flexibility and encourages the long term solvency needed to provide good financial services to under privileged individuals (Azamri, 2014).

Relating to trade-off theories, it is assumed that companies trade off their pay backs with equity funding plus it looks at the most favorable financial mix after taking into account the market limitations like taxes, cost of bankruptcy along with agency (Martis, 2013). Nowadays, more and more entities from the developed world employ different sources from equity or debts to finance its operations when they need to expand their firm size or reinvest to gain more profits (AbuTawahina, 2015). Mutua (2016), established that inter-bank borrowing along with equity has considerable positive effect on performance though both long and short sources of financing insignificantly affected profitability.

In Kenya, the microfinance sector has experienced extremely high competition evidenced by the shifting market share and profitability (King'ori, Kioko & Shikumo, 2017). A study by Lislevand (2012) indicated that many the MFIs are greatly indebted, they use approximately four times more debt financing than equity. Good profitability in the microfinance sectors enhances stability of the banking industry while poor profitability affects not only the microfinance sector but the solvency and liquidity of individual MFIs.

## Statement of the Problem

The Kenyan DTMI face huge challenges due to inadequacies of retained earnings and exorbitant interest rates charged by commercial banks, which affect their financing structures (King'ori, Kioko & Shikumo, 2017). According to Monyi (2017), most DTMI in Kenya finance their operations using equity (72.42%) and borrowings

serve as their second (27.58%) main financing source. However, despite the use of equity financing as financing source, the performance of DTMI in Kenya has continued to deteriorate and as of December 2013, 4 out of 9DTMIs were yet to break-even (King'ori, Kioko & Shikumo, 2017).

Study by Lislevand (2012) established that there exists no impact of debt-equity ratios with MFIs performance. Ronoh and Ntoiti (2015) concluded that debt and equity had negative and considerable effect on banks productivity. Several studies have been undertaken on capital structures and firm's profitability but the studies provide conflicting findings and cover a variety of firms in different industrial sectors, which have different financing requirements. In addition, in Kenya, most researches focus on impacts of capital composition on the quoted companies, SMEs and commercial banks as and not on DTMIs; they haven't also focused specifically on the influence of equity financing. Therefore, there arises empirical and contextual research gaps which this study sought to provide answers by assessing, how equity financing affects the financial performance of DTMIs in Kenya.

### **Research Objectives**

The general aim of this study was to assess the effect of equity financing on financial performance of DTMIs in Kenya.

### **Significance of the study**

The findings are also significant to policy making institutions such as the alliance of micro-finance banks and CBK who may use the study findings and recommendations to develop policy mechanisms to improve profitability of the MFIs. The policy making firms may as well utilize the study results in generation of policies than could improve the microfinance's profitability.

In Kenya, DTMIs are governed by CBK under micro-finance act of 2006 and the state is in control. For that reason, the State and CBK can apply the research suggestions to draw rules relating to activities of DTMIs.

This paper adds to the existing literatures relating to equity financing along with the profitability of the Kenyan DTMIs. The study also suggests areas which may require further research.

### **Literature Review**

#### **Theoretical Review**

##### **The Tradeoff Theory**

This postulation is founded by Kraus and Litzenberger (1973) it affirms that indebted firms have their market values equivalent to market values of the debited firms plus current values of tax on debt interests, deduct current insolvency expenditures. This presumption under review takes on firm's trade-off advantages with debt expense along with equity funding furthermore it establishes the best financial composition taking into consideration taxes' advantages, bankruptcy costs and agency costs (Mokhova & Zinecker, 2014). The theory however aims at the tradeoff between tax benefit on leverage and costs of bankruptcy and does consider equity and retained earnings financing. It argues that while investment decision and firm assets are held constant, an optimal financial composition is achieved when the tax benefit of debt equals to leverage associated costs, which include financial distress, bankruptcy and agency (Serghiescu & Văidean, 2014).

According to the speculation, an optimal financial mix is reached when the current tax shield value is offset in the current values of financial distress expenses (AbuTawahina, 2015). Tradeoff theory expects that corporation to choose levels of debt in order to achieve a balance among the benefits from the interest tax shield with the costs related to a future financial distress or with current financial inflexibility (Nassar, 2016). In this study, the theory supports that firm's focus in alternate leverages to equity fund, conversely, so as to find optimal leverage ratio and capitalize on the firm's net worth

##### **Empirical Review**

Njagi, Kimani and Kariuki, (2017) assessed the relationship of equity financing on small enterprises efficiency in Kenya. Their paper uses a descriptive study proposes and sampled sixty SMEs. Collection of data was by use self-administered questionnaires and analysis of the collected was done use of multiple regressions. The paper established that equity finances had positive connections with SMEs' performance and that equity offered a lifelong financing option with no or minimal cash outflow inform of interest. The study however focused on SMEs and not microfinance institutions.

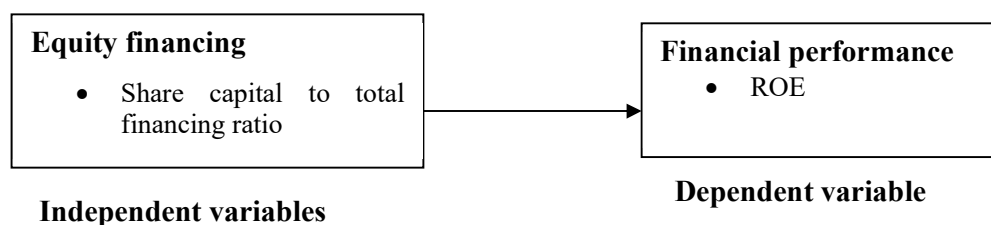
Bashiru and Bukar (2016) looked at the impacts of financial structures on financial proficiency of the quoted Nigerian Oil and Gas firm using an ex-post facto study design and utilized panel data from 2005 to 2014. The study used a panel data technique to analyze data. The results revealed that equity financing and total debt had negative but large connection with profitability and firm's size along with tangibility had positive but considerable effect on Return on equity and EPS. The paper aimed at financial composition and the profitability of quoted companies and not MFIs.

Adesina, Nwiodobie and Adesina (2015) analyzed the outcomes of post-consolidation financial arrangements for the Nigerian listed banks on economic performance. The paper tested ten Nigerian banks for a time frame of 8 years from 2005 to 2012. The paper used ordinary least square regression analysis to analyze the collected secondary data. The study outcomes concluded that financial arrangements had considerable positive connection with improved productivity of Nigeria quoted banks. This study did not focus on financial structures with performance of MFIs but on other banking entities.

Githire and Muturi (2015) evaluated how performance of listed firm in Kenya was affected by its structure of financing covering 2008 and 2013. This paper used explanatory non-experimental study design and secondary data gathered and used analysis by use of multiple regression analysis. Outcomes showed that long term leverage and equity has positive but considerable effects on profitability. In conclusion; short debt debts and equity finances improves company's productivity, whereas short-term debts decreases the firm' financial measures. This study focused on listed firms in Kenya to establish how capital structure affects their performance.

### Conceptual Framework

The conceptual framework is a diagrammatic explanation of the association linking independent factors and the dependent factors. The conceptual framework entails a visual presentation that explains either graphically, or in narrative form the key factors, concepts or variables and the presumed relationship among them. The conceptual framework for this study is depicted by figure 1 as follows;



**Figure 1: Conceptual Framework**

### Research Methodology

The study adopted a descriptive study design. A descriptive design entails an empirical inquiring into which the author does not have a direct control of considered variables (Sekaran & Bougie, 2011). Descriptive design was adopted as it enabled researchers to obtain inclusive information relating to the study population therefore giving a significant precise data.

The population of this study comprised of the 13 microfinance banks in Kenya as at 31<sup>st</sup> December 2018. The sampling frame of this paper consisted of the thirteen DTMFIs in Kenya. This study carried out a census of the thirteen DTMFIs in Kenya hence no sampling. A census refers to the study of the entire study population and comprises of all the elements in the research. A census is deemed appropriate since the population which is targeted is small and finite.

A data collection sheet was used as the main study instrument. The data sheet was used to retrieve secondary data from the accounting reports together with the annual reports for the DTMFIs. The data collection sheet collected data on equity financing, short term financing, long term debt financing, retaining profits, total assets, total equity and net incomes that were adopted in calculating the specific ratios that shall be employed in the analytical model. This paper entirely used secondary sources of data that was obtained through the use of a data collection sheet. The key sources of the study data were the DTMFIs published financial reports. The statements were obtained from

the individual DTMI's websites and from the Kenyan Central Bank (the annual banking supervision reports). The data was retrieved for a period of 5 years from 2014 to 2018.

This study used descriptive and inferential data analysis method. The descriptive statistics entails the measures of central tendency like mean, maximum, minimum and standard deviation were used to organize and summarize the collected data into a meaningful form. Inferential statistics were used to draw implications from the data gathered with correlation and regression analysis being adopted. Correlation analysis was employed in assessing strength and direction of the association between equity financing and financial performance while the regression analysis was used to check for the hypothesis concerning the connection of equity financing with financial performance. The SPSS software was adopted and the analyzed data was presented by use of charts and tables.

The regression model was specified as follows

$$Y = \beta_0 + \beta_1 X_1 + e$$

Where,

Y = Financial performance determined by return on equity (ROE)

X<sub>1</sub> = Equity financing determined by share capital to total financing ratio

β<sub>0</sub> = Constant of the regression equation

β<sub>1</sub> = Coefficients of the regression model

e = Error term

## Research Findings and Discussion

### Descriptive Statistics

The study calculated standard deviation, mean, maximum and minimum values for all the variable, both dependent (financial performance) and the independent (equity financing).

**Table 2: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Equity Financing	65	.21	.53	.3720	.10229
Financial Performance	65	.06	1.83	.6334	.36842
Valid N (listwise)	65				

From the findings presented in table 1, the minimum value of equity financing among the deposit taking microfinance institutions between 2014 and 2018 was 0.21 while the maximum value was 0.53. On average, the DTMI's recorded equity funding of 0.3720 and the standard deviation was 0.10229. The findings show that the mean value of financial performance of deposit taking microfinances was 0.6334. The highest value for financial performance was 1.83 while the lowest value was 0.06 and the level of deviation from the mean was 0.36842.

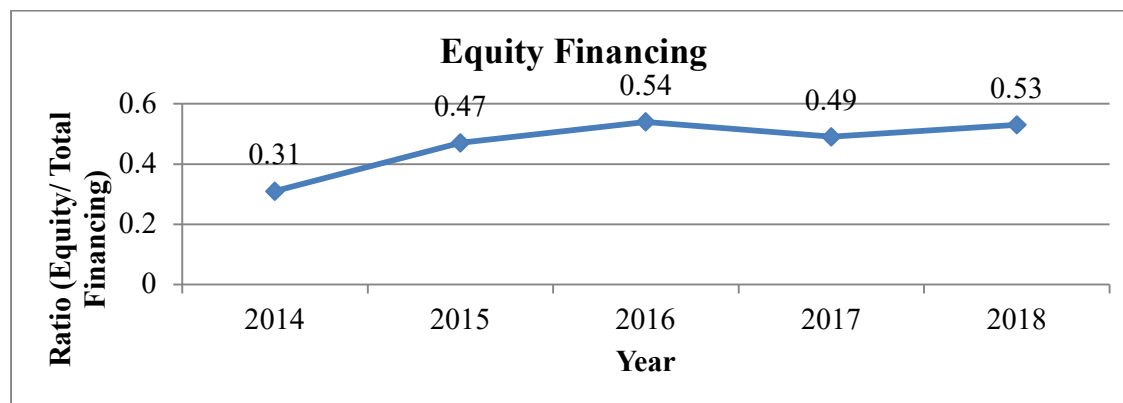
### Trend Analysis

Trend analysis refers to the direction taken by the market during specific time. There is no specified period of time that is considered minimum for a trend to be considered but longer periods are preferred because they are considered more notable. Trend Analysis helps identify trends in the input dataset. This section shows patterns of change in an indicator over time. This section presents the trend analysis for equity funding and financial performance.

### Equity Financing

Equity financing refers to issuance of share units to new and existing investors so as to maintain the organizational activities. Equity financing arises when a firm raises funds through selling shares units to the potential shareholders and investors. Equity financing is different from other tools of debt financing because it needs no collateral but rather it is dependent on the ability to create value by growing enterprises. The study computed equity financing

for the deposit taking microfinance institutions between 2014 and 2018. Equity funding was measured as a ratio (Equity/ Total Financing) and the average values were used to fit a line graph which showed the trend over the 5-years.

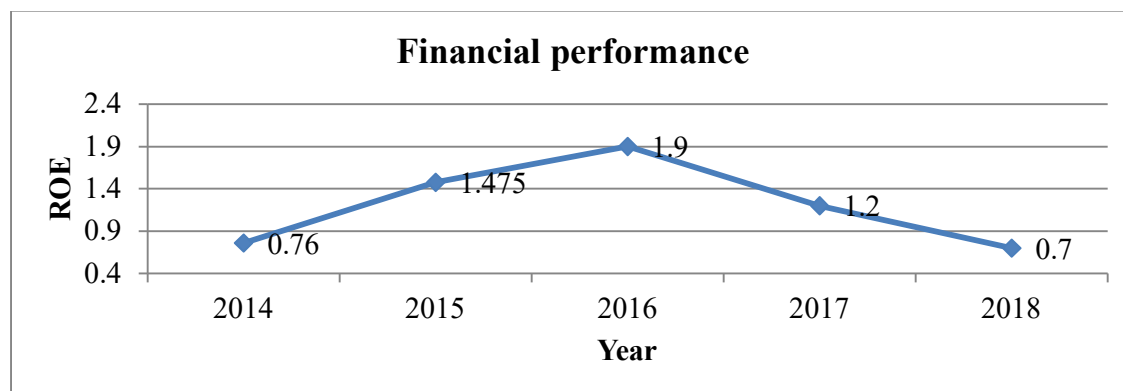


**Figure 2: Trend in Equity Financing**

From the findings presented in figure 2, there was steady increase in equity financing of deposit taking micro finance institutions between 2014 and 2016 from 0.31 to 0.54 which slightly declined in 2017 to 0.49 but later in 2018 it increased to 0.53. Therefore, it can be observed that from 2014 to 2018, the deposit taking microfinance institutions have grown their equity financing significantly despite the slight decline observed in 2017. Company directors see that equity funding as an effective means of growing company size plus it gives incentives to grow companies beyond their best sizes as their returns are dependent on the size of assets and not on performance (Gharaibeh, 2015); the study findings concurs with Gharaibeh’s sentiments.

**Financial Performance**

Financial performance is a gauge used to determine the general financial productivity of an organization over a span of financial period and aids in comparison of financial results of other firms in the same sector. The study measures financial performance using Return on Equity. The findings obtained were used to fit a line graph that showed the trend in financial performance of the deposit taking microfinance institutions over the five-year period under consideration (from 2014 to 2018).



**Figure 3: Trend in Financial Performance**

From the findings in figure 3, the financial, performance of the deposit taking microfinance institutions was at its peak in 2016 recording ROE of 1.9. The findings further showed that there was a steady increase in financial performance of the DTMFIs from 2014 to 2016 which later declined steadily to 0.7 in 2018. Therefore, the financial performance of the DTMFIs fluctuated during the 5-year period under investigation (i.e. between 2014 and 2018). A sound firm’s profitability rewards the shareholders for their investment and stimulates additional investment which will bring further economic growth (Suardi& Noor, 2015). Therefore, deposit taking microfinance institutions are focused on increasing their financial performance.

### Correlation Analysis

Correlation analysis was employed in assessing the linearly association among the variables. The values of the correlation coefficient ranges between -1 and 1 where +1 value indicates a perfect positive relationship between the variables and a value of -1 indicates perfect negative relationship between the variables. If the correlation coefficient value is 0 it implies that there is no relationship existing between variables under consideration.

**Table 3: Correlations**

		Financial Performance	Equity Funding
<b>Financial Performance</b>	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	65	
<b>Equity Funding</b>	Pearson Correlation	.739**	1
	Sig. (2-tailed)	.000	
	N	65	65

From the findings, equity financing positively and significantly related with financial performance ( $r=0.739$ ,  $p=0.000$ ). Significance of their relationship was evident since the p-value (0.000) was less than selected level of significance (0.05). Based on these findings, it is evident that equity funding have significant relationship with financial performance of deposit taking microfinance institutions.

### Regression Analysis

The study sought to establish the influence of equity funding on financial performance of DTMIIs.

Model summary was used to show the amount of changes in financial performance of DTMIIs that can be attributed to changes in equity funding, short-term financing, long-term financing and revenue reserves. In Table 3, the value of R square was 0.770 an indication that 77% variation in financial performance of deposit taking microfinance institution can be explained by changes in equity funding, short-term financing, long-term financing and revenue reserves. The remaining 23% suggest that there are other factors that were not discussed in this study that can be used to explain variation in financial performance. The study also established that the variables have a strong positive relationship as indicated by correlation coefficient (R) value of 0.877.

**Table 4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.877 <sup>a</sup>	.770	.754	.18256

a. Predictors: (Constant), revenue reserves , long-term financing, short-term financing, equity funding

Analysis of variance is used to test the significance of the model. From the findings in Table 4, the p-value obtained (0.000) was less than the selected level of significance (0.05). This therefore suggests that the model was significant. Further, the F-calculated value from the ANOVA table (50.162) was greater than the F-critical value obtained from the f distribution tables ( $F_{4,60}=2.525$ ) which is an indication that revenue reserves, long-term financing, short-term financing, and equity funding can be used in predicting financial performance of deposit taking microfinance institutions.

**Table 5: ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.687	4	1.672	50.162	.000 <sup>b</sup>
	Residual	2.000	60	.033		
	Total	8.687	64			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), revenue reserves , long-term financing, short-term financing, equity funding

The regression model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + e$$

Where; Y = Financial performance determined by return on equity (ROE);  $X_1$  = Equity financing determined by share capital to total financing ratio;  $\beta_0$  = Constant of the regression equation;  $\beta_1$ , = Coefficient of the regression model; and e = Error term.

From the findings in Table 5, the beta coefficients were fitted in the regression model and the following equation was developed;

$$Y = 1.373 + 0.882X_1 + e$$

From the above regression equation, it is evident that holding equity funding to a constant zero, financial performance will be at a constant value of 1.373.

The findings also show that equity funding has a positive influence on financial performance ( $\beta=0.882$ ,  $p=0.011$ ). The influence was significant since the p-value (0.011) was less than the selected level of significance (0.05). Therefore equity funding has a positive significant influence on financial performance. The first research question was; what is the effect of equity financing on financial performance of the DTMI in Kenya? From the coefficients table, the t-statistic (2.633) for equity financing had p-value (0.011) less than selected level of significance (0.05). The study therefore concluded that equity financing has a positive significant influence on financial performance of DTMI in Kenya. These findings concur with the findings of Njagi, Kimani and Kariuki, (2017) who assessed the relationship of equity financing on small enterprises efficiency in Kenya and established that equity finances had positive connections with SMEs' performance and that equity offered a lifelong financing option with no or minimal cash outflow inform of interest.

**Table 6: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.373	.241		5.697	.007
Equity Funding	.882	.335	.245	2.633	.011

a. Dependent Variable: Financial performance

The study found that from 2014 to 2018, the deposit taking microfinance institutions grew equity financing significantly despite the slight decline observed in 2017. Equity funding is an effective means of growing company size plus it gives incentives to grow companies beyond their best sizes as their returns are dependent on the size of assets. The study also found that equity funding has a positive influence on financial performance. The influence of equity funding on financial performance was also found to be significant. Use of equity funds as element in financing mix is generally aimed at strengthening firm's capital composition along with financing business investments that need more finances and cannot be finance internally, for instance; acquisitions and business expansions.

The objective of the study was to establish the influence of equity funding on financial performance of DTMI in Kenya. The study found that equity funding has a positive influence on financial performance. The study further established that the influence of equity funding on financial performance was significant. Based on these findings, the study concluded that equity funding has a positive significant influence on financial performance of DTMI in Kenya. This simply means that increasing equity funding of DTMI will result to an increase in financial performance of the institutions.

Increasing equity financing was found to increase financial performance of DTMI. The study therefore recommends management of the DTMI to increase their equity financing by selling their shares to potential shareholders and investors. The study also recommends the institutions to use their equity funds as element in financing mix in order to strengthen their firm's capital composition along with financing business investments that need more finances and cannot be finance internally, for instance; acquisition and business expansions.

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