

DETERMINANTS OF FINANCIAL PERFORMANCE IN SMALL AND MEDIUM ENTERPRISES IN MOMBASA COUNTY KENYA

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Abstract: The main objective of the study was to find out the determinants of financial performance in Small and medium Enterprises (SME's) in Mombasa County, Kenya. Further envisioned to establish how financial leverage, size of the firm and liquidity affected the financial performance under the control of government checks and balances by a quantitative study design in which primary data was collected using a structured questionnaire. Liquidity was confirmed to have a significant impact on financial progress. Size of the firm was also established as significantly vital in business operation. Larger SMEs made more profits and the results indicate that there exists a strong positive and significant relationship between firm's equity and profitability.

Keywords: Firm Performance, Firm Size, Liquidity, Leverage.

1. INTRODUCTION

Financial performance is generally defined as a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues (Brealey, 2006). Small and medium enterprises (SME) vary from country to country. The term "SME" is used by European Union and international organizations such as World Bank and United Nations. The term small and medium businesses (SMB's) are predominantly used in United States of America (U.S.A) as per Kirby (2004). In most economies, the smaller enterprises are much greater in number than large companies.

SME's are often said to be responsible for driving innovation and competition in many economic sectors. The traditional definition in Germany of SME is a firm with a limit of 255 employees while in Belgium it could have a limit of 100 employees (Head, 2000). SME is independently owned and does not engage in many innovative activities. The businesses are managed in a normal way while expecting normal sales and profits. In most cases they are family owned and with at least 10 employees. In Europe micro-entities, as reported by Torres (2011), are companies with up to 10 employees while small companies employ up to 50 workers while medium sized enterprise consists of 250 employees.

As European Union (2003) defined SMEs as enterprises with almost 250 employees and an annual turnover not exceeding 50 million Euros, another definitions suggest that SMEs are businesses with fewer than 500 employees (Udretsch, 1999). United Nations Conference on Trade and Development (UNCTAD) on the other hand classified firms employing 5-500 persons as SMEs (Neclamegham, 1992). In a different environment, SME Solutions Center (SSC, 2007) suggested that SME in Kenya is a business formally registered, with an annual turnover of between Kshs. (8 - 100 million), an asset base of at least Kshs. 4 million and 5 to 150 employees.

The other description in Kenyan context was suggested by Capital Markets Authority (CMA) (2011) highlighting that an enterprise is categorized as a micro enterprise if it has (1 – 10) full time employees and an annual turnover of up to Kshs.

5 Million; a small enterprise with (11 – 50) full time employees and a turnover of Kshs. (5 – 50 Million) and Medium Enterprise with (51 – 100) full time employees and a turnover of Kshs. (51 million – 1 Billion).

2. STATEMENT OF THE PROBLEM

SMEs contribute to improved living standards, bring about substantial local capital formation and achieve high level of productivity and capability. They are recognized as the principal means of achieving equitable and sustainable industrial diversification and dispersal. The organizations tend to be more labor intensive and at a macro level, provide a substantial contribution to employment. Through increased employment in the country, the living standards of the citizens are improved thus reducing poverty level. In the long run, the GDP of the country increases leading to economic growth and development. Any business under financial distress can incur costs related to the situation such as expensive financing, opportunity cost of projects and less productive employees. This research project endeavors to identify customized financially efficient and feasible ways to help SME's avoid financial distress, curb its effects and to ensure a continuous and sustainable growth; by exploring the internal and external factors that make it possible for some enterprises to survive and grow with financial distress challenges while others fail yet they operate in similar markets and industrial circumstances. Increased number of MFIs has contributed to growth of enterprises in towns, like Mombasa, within Kenya as established by Cooper (2012).

3. RESEARCH OBJECTIVES

The research project had both general and specific objectives;

3.1 General Objective

The broad objective of this study was to investigate the determinants of financial performance in Small and Medium Enterprises in Mombasa County.

3.2 Specific objective

The specific objectives were;

- i. To find out the effects of the firms' liquidity on financial performance in Small and Medium Enterprises in Mombasa County.
- ii. To examine the effects of size of the firm on level of financial performance in Small and Medium Enterprises in Mombasa County.
- iii. To evaluate the effects of leverage on SMEs financial performance in Small and Medium Enterprises in Mombasa County.

4. THEORETICAL FRAMEWORK

Under this approach, prediction models are constructed based on some theoretic arguments. These theories are able to predict financial distress in firms by looking at distress conditions present in the firms.

4.1 Predictive Models

Determinant theories provide an assortment of empirically developed distress predictive models by means of matching accounting ratios and distressed firms. A variety of models have been developed in the academic literature using techniques like multiple discriminant analysis (MDA), logit, probit, recursive partitioning, hazard models, and neural networks. Despite the variety of models available, both the business community and researchers often rely on the models developed by Altman (2009; 2000) (cited by Wang and Campbell, 2010).

4.2 Wreckers theory of financial distress

After developing a reduced form default risk indicator, Campbell, Hilscher and Szilagyi (2005) present hypothesis that stocks of distressed firms perform in a manner which is vastly inferior to stocks of financially healthy firms. The wreckers' theory of financial distress seeks to explain the benefits that may step out of financial distress to stakeholders. It is not necessary to attribute the negative excess returns of distressed firms to inefficient or irrational markets. Such

negative excess returns can be shown to be the equilibrium outcome under efficiency in an environment where a subset of participants is able to draw returns (in kind) from distressed companies.

4.3 Early Bankruptcy theory

A bankruptcy system can avoid this inefficient equilibrium by staying creditor collection efforts so that a state official has time to decide whether the firm is worth saving (Alder, 2002). Early modern theory was pro letting the market make the liquidation/continuation decision. More concretely, a state official should conduct auctions of insolvent firms, free off current claims, distributing the proceeds to creditors. If economic value would be maximized by a piecemeal liquidation, the highest bids will be for individual assets; if continuing the firm as an economic entity would maximize value, then the highest bids would be for the firm as a unit (Longhover, 2004).

5. EMPIRICAL REVIEW OF THE VARIABLES

5.1 Firm Liquidity

Small business owner-managers can enhance their firm's profitability through the improvement of how efficiently they manage their working capital, as this frees up the amount of liquidity in the business. Firm's liquidity is the ability of an asset to be converted to cash quickly at low cost. Liquid assets can be converted into cash quickly and cheaply Brealey (2000).

5.2 Firm Size

The other determinant of financial distress is the firm size. The researcher also includes the natural logarithm of total assets, since the size of total assets should be sensitive to the probability of financial distress according to Hotchkiss (2005). MacCartan-Quinn (2003), argued that SMEs have a competitive edge over larger firms in regards to the latter, but are limited by a lack of market power, under capitalization and an inefficient management structure. Consequently, SMEs find survival in an ocean saturated with large predators a difficult task. As underlined previously, the importance of SMEs in a country's economy is largely related to the job creation process and hence, the reduction of unemployment (Torre et al., 2010).

5.3 Firm Leverage

Leverage is the portion of the fixed costs, which represents a risk to the firm. Operating leverage, a measure of operating risk, refers to the fixed operating costs found in the firm's income statement, whereas financial leverage is a measure of financial risk, refers to financing a portion of the firm's assets, bearing fixed financing charges in hopes of increasing the return to the common stockholders. The higher the financial leverage, the higher the financial risk, and the higher the cost of capital as shown by Shim and Siegel (2009). Another determinant of financial distress is firm leverage. Once again, the theoretical underpinning for leverage as a predictor of distress lies in the fact that leverage limits the ability of the firm to withstand negative shocks to cash flow.

5.4 Firm Financial Performance

Financial distress is a condition where a company cannot meet, or has difficulty paying off, its financial obligations to its creditors, typically due to high fixed costs, illiquid assets or revenues sensitive to economic downturns. In this regards, financial distress can affect the financial performance of an SME in that; it forces an SME to go into bankruptcy therefore winding up or going into liquidation. It also affects the operation of the firm leading to operating risk and laying off of employees(Beaver ,2006).

6. RESEARCH METHODOLOGY

6.1 Research Design

A research design is a framework or a blue print for conducting a research..Hence, this study will be conducted through a case study design. A case study, as highlighted by Mugenda and Mugenda (2003), is an in-depth investigation of a phenomenon.

6.2 Target Population

According to Kothari (2012), a population is a group of events, people or items of interest with a common observable attributes. The target population in this study shall comprise of all SME's registered in Mombasa County for a period of

2015, 2016 and for consistency the accessible population shall be 103 as in indicated in appendix iv list of SMEs out of which the sample population is calculated as noted by Mugenda and Mugenda (1999).

6.3 Sample and Sampling Technique

Sampling is a process of selecting a number of individuals or objectives from a population such that the selected group contains elements that are representative of characteristics found in entire group (Orodho and Kombo, 2002). This study adopted fisher (2011) sample size of 50%. For the case of this study, the sample comprised of about a half of the accessible population of 103 institutions which comes to 51.5 SMES.

6.4 Data Collection Instruments

The study will obtain both Primary and secondary data. Primary data will be obtained through administering questionnaires. The secondary data will be obtained from the existing annual financial reports of the sampled firms and relevant literature contained in magazines, websites and other secondary sources.

6.5 Pilot Study

The questionnaires will be pilot tested before the actual data collection. This will involve a few respondents from SMES in Mombasa to ascertain its effectiveness. The researcher will be interested in testing the reliability of the research instruments, the questionnaire hence validity of data collected.

6.6 Data Analysis and Presentation

The primary data will be obtained by the researcher through questionnaires will be edited; coded, tabulated and analyzed. The researcher shall employ multiple regression analysis to show the effect of the explanatory variables on the dependent variable. The equation one bellow, illustrates the relationship between the independent variables, dependent variable, the coefficients and the constant as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + X_5 + \epsilon \dots \dots \dots (i)$$

Y = financial Performance of SMEs.

β_0 = Autonomous variable (constant) such as fixed costs of operating the SME

$\beta_1, \beta_2, \beta_3, \beta_4$ = Partial regression coefficients.

X_1 = SMEs' Liquidity

X_2 = SMEs' Size

X_3 = SMEs' Leverage,

ϵ = disturbance/ error/ stochastic term

The multiple linear regression equation above shall be used to determine the relative sensitivity of each independent variable in affecting the determinant of financial performance of SMEs

7. DATA ANALYSIS AND SUMMARY OF FINDINGS

7.1 Response rate

Out of the 52 questionnaires administered, 50 were filled and returned, which represents 98%

7.2 SME liquidity on Financial Performance

The study sought to assess the effects of SME liquidity on financial performance of SMEs in Mombasa County. Table below summarizes respondents' level of agreement on the effects of SME liquidity on financial performance of SMEs in Mombasa County. Majority of the respondents agreed that SME solvency with a mean of 3.87 (4) to a great extent affects SME financial performance. Respondents further noted that cash flow 3.95 (4) to a great extent affects SME financial performance. A small number of respondents agreed that SME current liabilities 2.32 (2) to a small extend affects SME performance. On average, the findings indicate that a firm liquidity to a moderate extend affects financial performance of SMEs in Mombasa County.

SME Liquidity on Financial Performance (n=50)

Sub-variable	Mean	Implication
Current Assets	3.01	3
Current liabilities	2.32	2
Cash flow	3.95	4
SME solvency	3.87	4
Accrued expenses	3.21	3
Grand	3.27	3

7.3 SME Size on Financial Performance

The study sought to assess the effects of SME size on financial performance of SMEs in Mombasa County. Table below summarizes respondents' level of agreement on the effects of SME size on financial performance of SMEs in Mombasa County. Majority of the respondents agreed that volume of transactions with a mean of 4.77 (5) to a greatest extent affects SME financial performance of SMEs. Respondents further noted that volume of sales 4.46 (4) to a great extent affects SME financial performance. Number of branches too was a big factor affecting SMEs financial performance with a mean of 4.21 (4). A small number of respondents agreed that SME number of employees 2.22 (2) to a small extend affects SME financial performance. On average, the findings indicate that a firm size to a great extent affects financial performance of SMEs in Mombasa County.

SME Size on Financial Performance (n=50)

Sub-variable	Mean	Implication
Number of employees	2.22	2
Volume of sales	4.46	4
Capital base	3.33	3
Volume of transactions	4.77	5
Number of branches	4.21	4
Grand	3.798	4

7.4 SME Leverage on Financial Performance

The study sought to assess the effects of SME leverage on financial performance of SMEs in Mombasa County. Table below summarizes respondents' level of agreement on the effects of SME leverage on financial performance of SMEs in Mombasa County. Majority of the respondents agreed that increase in financial leverage with a mean of 1.99 (2) to a small extent increases the financial performance of SMEs. Respondents further noted that operating leverage 2.44 (2) to a small extent affects SME financial performance. A small number of respondents agreed that leverage ratio with a mean of 2.09 (2) to a small extend affects SME financial performance. About financial leverage with a mean of 1.02 (1), respondents noted that an increase in financial leverage to no extend affects SMEs firm performance. On average, the findings indicate that a firm leverage to a small extent affects financial performance of SMEs in Mombasa County. Leverage increases SMEs commitments which in turn reduces firm's financial performance.

SME Leverage on Financial Performance (n=50)

Sub-variable	Mean	Implication
Operating leverage	2.44	2
Financial leverage	1.02	1
Cost of capital	2.41	2
Leverage ratio	2.09	2
Grand	1.99	2

7.5 Measurement of SME Financial Performance

The study sought to assess the effects of SME size on financial performance of SMEs in Mombasa County. Table below summarizes respondents' level of agreement on the measurement of financial performance of SMEs in Mombasa County.

Majority of the respondents agreed that corporate profits with a mean of 4.89 (5) to a greatest extent contributed to financial performance of SMEs. Respondents further noted that return on assets 4.46 (4) to a great extent contributed to the financial performance of SMEs in Mombasa county. A small number of respondents agreed that equity with a mean of 3.21 (3) contributed to SME financial performance. On average, the findings indicate that corporate profits, return on assets, asset base and equity contributes to financial performance of SMEs in Mombasa County.

Measurement of Financial Performance (n=50)

Sub-variable	Mean	Implication
Corporate Profits	4.89	5
Return on assets	4.46	4
Asset base	3.56	4
Equity	3.21	3
Grand	4.03	4

7.6 Correlation Analysis

Correlation refers to a technique used to measure the relationship between two or more variables. When two variables are correlated, it means that they vary together. Positive correlation means that high values on one variable are associated with high values on the other, and that low values on one are associated with low values scores on the other (Struwig & Stead, 2013). Correlation coefficient value is a numerical number between 0.0 and 1.0. The closer the correlation is to 1.0, the stronger the relationship between the two variables. The sign of the correlation coefficient means either a positive or negative correlation coefficient. The positive correlation coefficient means that the variables move in the same direction, while negative correlation means variables move in opposite directions. The correlation significance is indicated by a probability value of less than 0.05. As established by the Pearson coefficient of correlation, SME liquidity and SME size have positive significant relationship with financial performance while SME leverage had a negative significant relationship with financial performance.

Pearson correlation

	Financial Performance	Liquidity	SME Size	Leverage
Financial Performance	1.00			
Liquidity	.210	1.00		
	.142			
	.050			
SME Size	.193**	.198	1.00	
	.000	.168		
	.023	.043		
Leverage	-.225*	-.389**	.291*	
	.021	.000	.004	1.00
	0.00	.050	.000	

Pearson correlation (**. Correlation is significant at the 0.01 level (2-tailed).)

7.7 Coefficient of Determination (R²)

A confirmatory factors analysis was used in assessing the research model. The four factors were then subjected to linear regression analysis in order to measure the success of the model and predict causal relationship between the explanatory variables and the dependent variable.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.545 ^a	.297	.234	.07008
a. Predictors: (Constant), Leverage, SME Size, Liquidity, Annual Profit				

The model explains 29.7% of the variance (R Square = 0.297) on financial performance. Clearly, there are factors other than the four proposed in this model which can be used to predict organizational performance. However, this is still a dependable model in consideration to Cooper and Schinder's, (2013) opinion that as much as lower value R square of 0.10-0.20 is acceptable in social science research. The implication here is that 29.7% of the relationship is explained by the identified model independent variables whereas the rest 70.3% is explained by other factors in the organizational performance not studied in this research.

7.8 Regression Analysis

The regression analysis was modeled to measures how well our overall model fits, and how well predictors; SME liquidity, SME size, and SME leverage are able to predict Financial performance. The linear regression analysis modeled the relationship between the dependent variable (financial performance) and independent variables (SME liquidity, SME size, and SME leverage).

7.9 Multiple Regression Results of Determinants on Financial Performance.

A multiple regression was conducted to see if the three Determinants predicted financial performance in SMEs in Mombasa County. Table below shows the coefficients of Multiple Regression.

Regression Coefficients						
Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.613	.108		3.903	.000
	Firm liquidity	.219	.099	.245	2.627	.010
	Firm size	.177	.051	.212	2.169	.003
	Firm leverage	-.230	.083	-.331	3.247	.010

$$Y = (0.613) + .219X_1 + .177X_2 - .230X_3 + \epsilon \dots \dots \dots (i)$$

Where:

Y = Financial Performance

X1 = SME liquidity

X2 = SME Size

X3 = SME Leverage

Therefore, the study compared a one unit increase to SME liquidity while the rest of the variables = 0, then study would predict financial performance as shown below.

$$(0); Y = 0.613 + 0.219(1) + 0.177(0) - 0.230(0)$$

$$Y = 0.613 + 0.219 = 8.32$$

8. DISCUSSION OF KEY FINDINGS

This section discusses the research findings presented in the previous sections based on the objectives of the study. The general objective of the study was to investigate the determinants of financial performance in Small and Medium Enterprises (SME's) in Mombasa County. The three specific objectives and thus the six variables under study were; SME liquidity, SME size, and SME leverage. The study was motivated by the growing concern for SMEs to be profitable,

sustainable and prosperous. From the findings, the inferential statistics indicate that, (grand mean = 3.76) for Grand Perception of all determinants of financial performance, inferring to Survey Value (4), coded as “Great Extend” response. Therefore, it can be concluded that, respondents agreed to a great Extend that, the three determinants (SME liquidity, SME size and SME leverage) will positively influence the financial performance of SMEs in Mombasa

The correlations indicated that firm liquidity and firm size had a positive significant relationship with financial performance. Firm leverage had a negative relationship with firm liquidity, firm size and financial performance. In general, the results suggested that, an increase in firm liquidity and firm size increases financial performance while an increase in firm leverage leads to decrease in financial management. The study further conducted regression analysis and the results indicated that the parameters in the model are β_0 , the Y-intercept (Constant = .613); β_1 , the first regression coefficient (SME liquidity = .219); β_2 , the second regression coefficient (SME size = .177); β_3 , the third regression coefficient (SME leverage = -.230); The study modeled financial performance (Y) based on the determinants in the SME liquidity (X_1), SME size (X_2), and SME leverage (X_3). From the study, an $R^2 = .297$ indicates that the regression line moderately fits the data. Using the enter method it was found that the three determinants explain a significant amount of the variance in the value of financial performance. This means the value of F is statistically significant at a level of 0.01, which suggests a linear relationship among the variables. The statistical significance at a 0.01 level means there is a 99 percent chance that the relationship among the variables is not due to chance.

9. CONCLUSIONS

The results established that the determinants (SME liquidity and SME size) were found to significantly and positively affect financial performance of SMEs while SME leverage was found to significantly and negatively affect financial performance of SMEs. It was concluded that managers of need to increase SMS liquidity and size. Specifically;

1. Firm liquidity significantly and positively leads to financial performance in SMEs.
2. Firm size significantly and positively leads to financial performance in SMEs.
3. Firm leverage significantly and negatively leads to financial performance in SMEs.

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