Equity Financing Strategy and the Performance of Small and Medium Enterprises in Kenya

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Abstract

The SMEs play an important role in economic growth and development in Kenya. However, in Kenya, SMEs are faced with survival problem. Their rate of failure is high and alarming. It is from this background that this study sought to investigate the cause of this failure by ascertaining the linkage between Equity Financing Strategy and the Performance of SMEs in Kakamega Municipality, Kenya. The Research Problem was formulated to answer the question; what are the Effects of Equity Financing Strategy on the Performance of SMEs? In so doing, the study ascertained causal linkage between Equity Financing Strategy, and the Performance; moderated by types of ownership and Sizes of Firms. To achieve desired results, this study employed a Descriptive Survey Research Design that employed a questionnaire with dichotomous questions to collect data from the respondents and made interviews with top management of the respective enterprises. This study was of significance to stake holders in financial sector, investors, business community, the government and the general public by: (1), providing a better understanding for designing lending policy, (2), providing a mechanism for regulating and controlling volume of credit to SMEs, (3), complementing the existing studies and contributing to knowledge on optimization of performance and (4), strengthening further research in this area. The study found evidence of strong correlation between Equity Financing Strategy and the Performance of SMEs. It also found that SMEs in Kakamega Municipality, Kenya were "financially starved".

Keywords: equity, financing strategy, performance, SMEs, profitability, tax liability, solvency

1. Introduction

This study sought to ascertain the effects of Equity Financing Strategy on the Performance of Small and Medium Enterprises (SMEs) in Kakamega Municipality, Kenya. In Kenya, SMEs rely heavily on primary sources of finance in financing their activities. This is because obtaining funds from secondary sources pose challenges. For SMEs to survive and grow, they need a well strategized financial structure. Financing Strategy is understood as the entrepreneur's goal in securing financing that identify the appropriate mix of funds with the least cost to the business and the fewest restrictions on business operations. A firm's Financing Strategy consists of the debt and equity used to finance its assets, with a minimum weighted-average cost of finance and thereby maximize its value. Equity financiers seek to retain as large a share of ownership in the firm as possible, so as to realize returns on the investment and innovation and to maintain business control.

The Performance of SMEs in Kenya has been a subject of growing interest in the field of finance due to their high rate of failure. The subjective measure of how well a SME uses its assets from its primary mode of business to generate revenues is referred to as 'Performance'. The concept of SMEs Performance covers both what has been achieved and how it has been achieved. Profitability, Tax Liability, Solvency, Value of the Firm and Growth in Sales were used in this study as key Performance indicators (KPIs). Kayanula and Quartey (2000) observe that SMEs are vital for development because they encouraged entrepreneurship, generate employment, and reduce poverty. On the other hand, the World Bank (2006) found that SMEs make up approximately 81 percent of Africa's private sector firms, with 51 percent being small-scale and 31 percent being medium-sized. These are collaborated by; (1), the findings of the World Bank surveys in Sub-Sahara Africa in 2009, which found that SMEs contributed to over 50 percent of new jobs in Sub-Sahara Africa in 2009, and, (2), a recent study by Miura, (2013), which found that SMEs in Japan numbered 4.2 million and accounted for 99.7 percent of all firms

compared to the 0.3 percent of large firms in 2006, and that SMEs employed 42 million people, which is 78 percent of total employment. SMEs are therefore the prime vehicle for economic development in both developed and developing nations, and which should be rescued from collapsing.

This study was based on the theoretical pronouncement of Modigliani and Millers (1958). His two main strands, namely, the Static Trade-off Theory, and the Pecking Order Theory form the basis of the study. The Static Trade-off theory states that a firm can reach its optimum level of debt when its marginal benefit is equal to its marginal cost. Myers' (1984) Pecking Order Theory, on the other hand, talks about asymmetry information in corporations, especially in small firms and advocates the use of internal financing to external financing until the internal financing is unavailable. It relates to how conveniently and easily a firm can access capital through internal financing (retained profit).

Myers and Majluf (1984) emphasizes on frictions due to asymmetric information between managers and outside investors. In the Pecking Order Model, a financial hierarchy descends from internal funds, to debt; to external equity.This argument is supported by Green et al. (2002), who found that most firms had shifted their development strategies towards a greater reliance on the use of organized financial markets to finance their assets.

From the foregoing there was need for this study to heavily rely on these theoretical approaches in ascertaining the causal linkage between Equity Financing Strategy and the Performance of SMEs.

2. Literature Review

2.1 Theories on Equity Financing Strategy

The study applied theories and past studies founded on Modigliani and Miller, (1958). Of his four conflicting theories, the most important in this study were: the Static Trade-off, the Pecking Order, and the Signalling Theories. Myers (op. cit.) divided the contemporary thinking on financing strategy into the first two theoretical currents; the Static Trade-off and the Pecking Order.

2.1.1 The Static Trade-off Theory

Under the Static Trade-off of Financing Strategy (also referred to as the Tax Based Theory), Baxter, (1967) and Altman, (2002), noted that optimal financing strategy is obtained where the net tax advantage of debt financing balances leverage related costs such as financial distress and bankruptcy, holding the firm's assets and investment decisions constant. In view of this theory, issuing equity finance means moving away from the optimum and should therefore be considered as not good. Myers (op. cit.) had found that firms adopting Static Trade-off were regarded as setting a target debt-to-value ratio with a gradual attempt to achieve it. He however, suggested that managers will be reluctant to issue equity finance if they feel it is undervalued in the market. The consequence is that investors perceive equity issues to occur only if equity is either fairly priced or overpriced. As a result investors tend to react negatively to an equity issue and management is reluctant to issue equity.

2.1.2 The Pecking Order Theory

The Pecking Order Theory (also referred to as the Information Asymmetry Theory) was proposed by Myers (op. cit.), and Myers and Majluf op. cit. It states that firms prefer to finance new investment first internally with retained earnings, then with debt, and finally with issue of new equity. He argues that an optimal Financing Strategy is difficult to define as equity appears at the top and the bottom of the 'pecking order'. Internal funds incur no flotation costs and require no disclosure of the firm's proprietary financial information that may include the firm's potential investment opportunities and gains that are expected to accrue from undertaking investments. They pointed out that underpricing would be the best result of less information held by potential investor vis-a-vis management with respect to the expected cash flows from the firm's assets, both current and future. Considering this information asymmetry, investors would infer that the management would issue equity only when it is overpriced. Thus the newly issued equity might be sold at a discount. This would be regarded as a wealth transfer from existing investors to the new ones. This problem could be avoided if the firms use internally generated resources, such as retained earnings.

2.1.3 Signaling Theory

The impact of the signaling factor as already discussed in the Pecking Order Theory is the problem of the underpricing of equity. If a firm issues equity instead of debt for financing its new projects, investors will interpret the signal negatively. Since managers have superior information about the firm than investors, they might issue equity when it is overpriced.

2.2 Empirical Studies

Several empirical studies on Financing Strategy indicate a negative relationship between Financing Strategy and the Performance. Studies carried by Rajan and Zingales, op. cit., and Booth et al. (2001) reported negative relationship between Financing Strategy and the Performance. On the contrary, Roden and Lewellen, (1995); and Berger, Allen, Bonaccorsi and Emilia, (2006), reported positive relationship between Financing Strategies and firm's Performance. Similarly, Zeitun and Tian (op. cit.), found out that firm's Financing Strategy have a significant and negative impact on the firm's Performance measures in both the accounting and the market.

Study by Murinde et al. (2004) observed that retentions of profits are the principal source of finance. Earlier, Titman and Wessel, op. cit. and Barton et al. (1989), had found that firms with high profit rates, all things being equal, would maintain relatively lower debt ratios since they are able to generate such funds from internal sources. MacKie-Mason, (1990) on the other hand studied the tax effect on corporate financing decisions and provided evidence of substantial tax effect on the choice between Debt and Equity Financings.

3. Research Methodology

3.1 Research Design

This study employed a Descriptive Survey Research Design in which a sample size of 95 of the target population, computed using Nasiuma's (2002) formula was selected. The study covered a period of five years from 2009 to 2013. This design was useful to this study because it intensively described and analyzed the data, and provided descriptive and exploratory methods and results.

3.2 Target Population

The study targeted a population of about 2,713 enterprises that were operational in December, 2013 in Kakamega Municipality, Kenya. These comprised of SMEs whose annual turnover was Kshs 50 million or less, number of employees was 100 or less and / or total assets base was Kshs. 100 million or less.

3.3 Sample Size

This study applied Nasiuma (op. cit.) formula in determining sample size;

$$n = (NCY2) / (CY2 + (N-1)e2)$$

Where N is target population, CY is coefficient of variation (that is 0.5) and e is the tolerance at desired level of confidence, in this case it will be 0.05 at 95% confidence level. Firstly the whole population was divided according to category of enterprise as given in Table 1. Then a sample using the above formula was taken from each category for survey from enterprises that qualified within the definition of SMEs.

Table 1. Population of the types of enterprises in Kakamega Municipality, Kenya

Enterprise	Target Population	Sample Size
Wholesale / Retail Trade	1,437	50
Transport	44	2
Petrol Stations	58	2
Agricultural and Mining	59	2
Hotels, Restaurants, Bars and Entertainment	275	10
Professional Services	635	22
Financial	9	0
Education and Learning Institutions	65	2
Health and Medical	27	1
Industrial	104	4
Total	2,713	95

3.4 Sampling Procedure

Since the target population in this study was large, this study used sampling as a feasible means of collecting data. For the reliability of data, the population was stratified by categorizing enterprises based on ownership and size. The data collected was also grouped based on year of operation. This was necessary to obtain a set of data of observation made at different periods of time, between the years 2009 and 2013.

3.5 Data Collection Instruments

Data was collected by administering a questionnaire and examining figures from few records that SMEs

maintained.

3.6 Instrument Validity

Data collection instruments in this study were tested through a pilot study and necessary amendments made thereafter.

3.7 Instrument Reliability

Reliability of a test (instrument) was expressed as a coefficient with values varying between zero and one; where zero indicates no reliability and one indicates perfect reliability.

In this study, the instrument was subjected to Karl Pearson's Product Moment correlation coefficient formula below.

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{\{n\sum x^2 - (\sum x)^2\}}\sqrt{\{n\sum y^2 - (\sum y)^2\}}}$$

Where: r = reliability coefficient;

n = number of respondents;

X = total score of the test administration;

Y = total score of the retest administration.

3.8 Data Collection Procedure

Data collection was carried out on 95 sampled SMEs categorized according to: (1), Type of ownership. (2), Sizes of enterprise and (3), Years of operation. Data collection problems were minimized through pilot-testing and pre-testing, validity / quality checks, tabulation and monitored flexibility. Rigor related to instrument protocol development were paid attention to validity, intrusiveness (the Hawthorne effect) and tabulation. In addition, attention were paid to distinguish between collecting subjective and objective data, information on the formal and the informal organizational structures and processes and the differences between collecting facts vs. opinions vs. interpretations. Incomplete, missing or unusable data corrected immediately.

3.9 Data Analysis

In this study, for the purpose of achieving the main research objectives, and based on the nature of the data collected, use of panel data analysis and parametric statistical techniques for data analysis was employed. The analysis made use of the data which had both time and cross section dimensions. Panel data analysis techniques were used to analyze data over the period. Venn diagrams were used to shows all possible logical allocation and intersection of Strategies that lead to "Mixed Financing Strategies". Data was also analyzed quantitatively according to: (1), Year of operation (2), Performance factor, (3), Ownership, and (4), Size. This was followed by obtaining descriptive statistics; by finding means and standard deviations.

4. Presentation of Results

4. 1 Venn Diagrams

To achieve the desired results, this study employed the technique of Venn (1880) diagrams to logically analyze Strategies used by the respondents to finance their enterprises. These are shown in figures 1 to 5; covering the period 2009-2013.

Figure 1 show that 14 of the respondents financed their enterprises using Equity Strategy alone in year 2009.
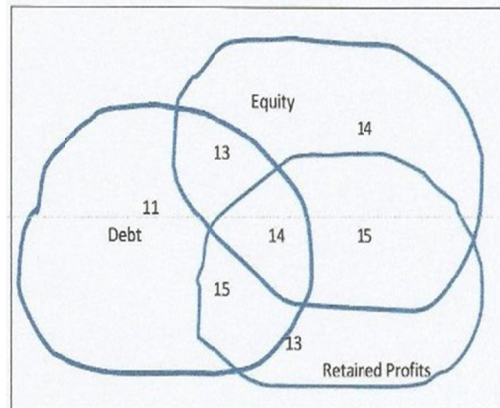
Figure 1. Venn Diagram showing financing strategies in the year 2009

Figure 2 show that 15 of the respondents financed their enterprises using Equity Strategy alone in year 2010.

Figure 2. Venn Diagrams showing financing strategies in the year 2010

Figure 3 show that 16 of the respondents financed their enterprises using Equity Strategy alone in year 2011
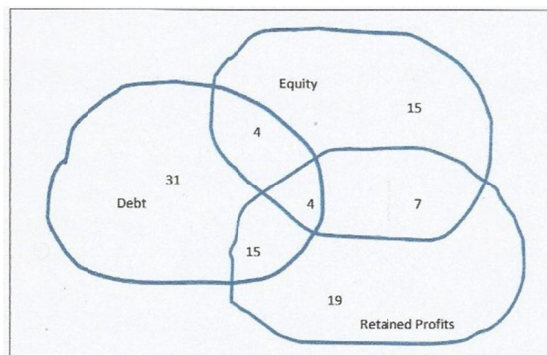

Figure 3. Venn Diagrams showing financing strategies in the year 2011

Figure 4 show that 17 of the respondents financed their enterprises using Equity Strategy alone in year 2012.
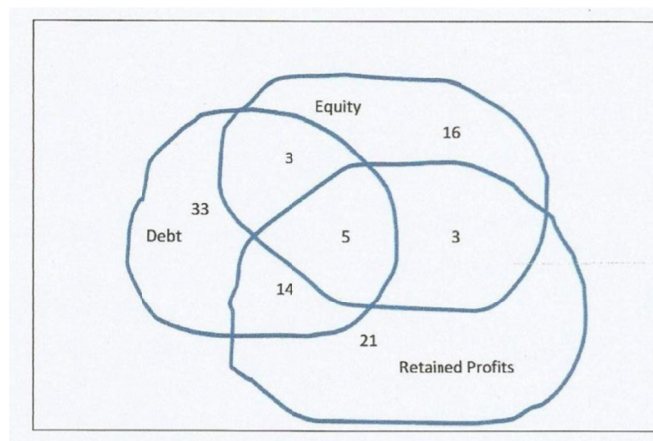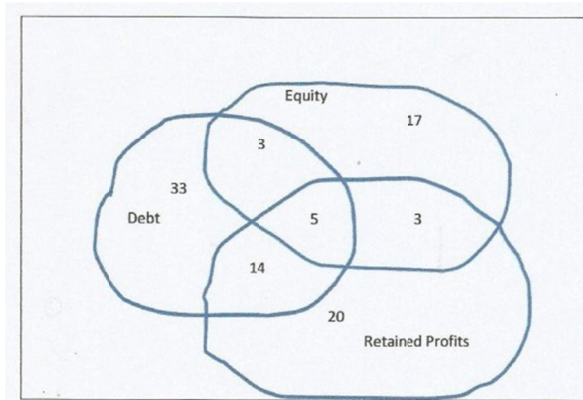
Figure 4. Venn Diagrams showing financing strategies in the year 2012

Figure 5 show that 18 of the respondents financed their enterprises using Equity Strategy alone in year 2013.
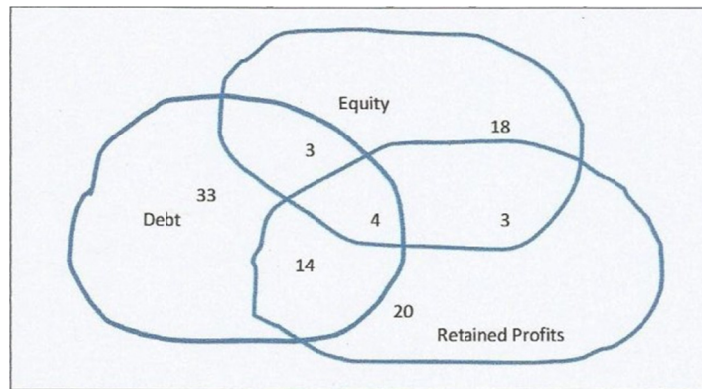

Figure 5. Venn Diagrams showing financing strategies in the year 2013

Table 2. Analysis of data from Venn Diagrams on financing strategy of SMEs over the past five years

Year/ Strategy	E	D	R	E∩ D ∩ R	E∩D	E∩R	D∩R	Total
2009	14	11	13	14	13	15	15	95
2010	15	31	19	4	4	7	15	95
2011	16	33	21	5	3	3	14	95
2012	17	33	20	5	3	3	14	95
2013	18	33	20	4	3	3	14	95
Total	80	141	93	32	26	31	72	475
Mean.	16	28.2	18.6	6.4	5.2	6.2	14.4	95
Mean%	17%	30%	20%	7%	5%	7%	15%	

Key: E = Equity Financing, D = Debt Financing, R = Retained Profits;

E∩ D ∩ R = a combination of Equity, Debt and Retained Profit Financings;

E∩D = a combination of Equity and Debt Financings;

E∩R = a combination of Equity and Retained Profit Financings;

D∩R= a combination of Debt and Retained Profit Financings.

4.2 Statistical Analysis

The results in Table 2 shows that on average 17 percent of the respondents employed Equity Financing Strategy a lone to fund the assets of their enterprises over the past five years.

4.3 The Effects of Equity Financing on the Performance of SMEs

Table 3. Statistical analysis of percentage of the amount of funding over the past five years

Amount (Million)	Equity	Debt	Retained Profits	E∩D∩R	E∩D	E∩R	D∩R
0≤20	92%	35%	52%	77%	71%	43%	27%
20≤ 40	8%	24%	24%	23%	29%	57%	20%
40≤ 60	0%	19%	13%	0%	0%	0%	23%
60≤ 80	0%	16%	5%	0%	0%	0%	18%
80≤ 100	0%	6%	5%	0%	0%	0%	12%
Total	100%	100%	100%	100%	100%	100%	100%

The results in table 3 shows that 92 percent of Equity funding was less than Kshs. 20 million, 8 percent was 20 million and less than 40 million.

4.4 Regression Analysis

This study examined the trends of the Financing Strategies over the past five years by finding the Slopes of their regression curves. The results of the slopes are given in Table 4. The results show a positive slope of 0.8 for Equity Financing Strategy over the past five years, indicating a steady increase in the number of respondents who financed their enterprises using Equity.

Table 4. The slope of the financing strategy curves (2009-2013)

Financing Strategy	E	S	Diff	Slope = (E-S)/T
Equity	18	14	4	0.8
Debt	33	24	9	1.8
Retained Profits	20	14	6	1.2
Equity, Debt & Retained Profits	4	8	-4	-0.8
Equity & Debt	3	4	-1	-0.2
Equity & Retained Profits	3	5	-2	-0.4
Debt & Retained Profits	14	26	-12	-2.4

Key: E = End of period data; S = Start of period data; T= Time - 5 years (2009-2013).

4.5 Correlation

There was evidence of significant positive correlation between Equity Financing Strategy and the Performance variables of Enterprises over the past five years as shown in Tables 5 to 8. They all gave the degree of association of 1 as follows:

Table 5 shows a strong relationship between Equity Financing Strategy and Profitability of the Enterprises.

Table 5. Relationship between equity financing and the profitability

Equity (x) Mid points	fx No. of Respondents	Profitability (y) Mid points	fy No. of Respondents
10	7	0.5	0
30	0	1.5	2
50	0	2.5	4
70	0	3.5	1
90	0	4.5	0
250	7	12.5	7
Mean x	10.00		
Mean y	2.36		
Standard deviation	7.14		
Correlation r	1.00		

Table 6. Relationship between equity financing and tax liability

x Mid points	f No. of Respondents	y Mid points	f No. of Respondents
10	7	0.5	7
30	0	1.5	0
50	0	2.5	0
70	0	3.5	0
90	0	4.5	0
250	7	12.5	7
Mean(x)	10	Mean(y)	0.5
Standard deviation 7.14		Standard deviation 2.36	
Correlation r 1			

The results of Table 6 show a strong relationship between Equity Financing Strategy and Tax liability of the Enterprises.

Table 7. Relationship between equity financing and the solvency of the firm

x Mid points	fx No. of Respondents	y Mid points	fy No. of Respondents
10	7	0.5	6
30	0	1.5	1
50	0	2.5	0
70	0	3.5	0
90	0	4.5	0
250	7	12.5	7
Mean 10		Mean	0.64
Standard deviation 7.14		Standard deviation 0.755	
Correlation r 1			

The results of Table 7 show a strong relationship between Equity Financing Strategy and Solvency of the Firms.

Table 8. Relationship between equity financing and value of the firm

x Mid points	fx No. of Respondents	y Mid points	fy No. of Respondents
10	7	0.5	7
30	0	1.5	0
50	0	2.5	0
70	0	3.5	0
90	0	4.5	0
250	7	12.5	7
Mean	10.00	Mean 0.50	
Standard deviation 7.14		Standard deviation 0.00	
Correlation r 1			

The results of Table 8 show a strong relationship between Equity Financing Strategy and Value of the Firms.

Table 9. Relationship between equity financing and growth in sales

x	fx	y	f
Mid points	No. of Respondents	Mid points	No. of Respondents
10	7	0.5	2
30	0	1.5	3
50	0	2.5	2
70	0	3.5	0
90	0	4.5	0
250	7	12.5	7
Mean 10		Mean 1.5	
Standard deviation 7.14		Standard deviation 0.755	
Correlation r 1			

The results of Table 9 show a strong relationship between Equity Financing Strategy and Growth in sales.

Table 10. Analysis of variance

	Equity Financing	Debt Financing	Retained Profits
n	xE	xD	xR
1	70	0	130
2	0	30	0
3	0	500	0
4	0	0	0
5	0	270	0
∑	70	800	130
Mean (x)	14	160	26
Mean (x)²	196	25600	676

Note. (1/(3-1)).n. 13,138.67 =32,846.68;

F = 32,846.68 / 213,240 =0.15;

F at 5%,12,2=3.89.

Since the calculated F is less than 3.89, this study agrees with the proposition.

4.6 Ownership and Equity Financing in Relation to Performance

Changes in Equity Financing during the period were negligible to provide accurate statistical analysis to test the effects of Ownership Factor on the relationship between Equity Financing Strategy and the Performance Variables of SMEs.

5. Conclusions

Overall conclusions drawn from the findings of this study were that: (1) Equity Financing Strategy had empirical effect on the Performance of SMEs in Kakamega Municipality, Kenya. (2) Based on the findings of each Performance variables, the conclusion drawn was that there were positive significant relationships between Equity Financing Strategy and the Performance Variables: Profitability, Tax Liability, Value of the Firm, Solvency of the Firm and Growth in Sales. (3) The findings revealed that SMEs were "financially starved" to the extent of relying heavily on trade creditors to survive. Perhaps, this is the fundamental cause of their failure. (4) In particular, the findings showed that Equity Financing was not the most preferred financing strategy compared to Debt and Retained Profits Financing Strategies.

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