

## **Size as a Determinant of Choice of Source of Entrepreneurial Finance for Small and Medium Sized Enterprises in Thika District**

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### **Abstract**

*This article examines influence of firm size as a determinant of choice of source of entrepreneurial finance for small and medium sized enterprises in Thika district of Kenya. The study adopted an empirical descriptive survey study design. The population of interest comprised small and medium enterprises (SMEs) in Thika District, a total of approximately 800 firms. Stratified random sampling was used to select a sample of 259 firms. The survey instrument was a questionnaire administered to the owners or finance managers. Analysis of data was done using descriptive and inferential statistics. The study showed that there was no association of firm size with the source and choice of entrepreneurial finance. The study recommended that SMEs focus on optimizing their size in order to maximize on the potential to increase value in activities and enhance profitability. Adding value would enable SMEs demonstrate their potential for high growth and thus attract potential investors.*

**Key Words:** Source of entrepreneurial finance, Size of Firm, SMEs entrepreneurial finance Thika District, Debt Finance Thika District, Equity Finance SMEs Thika District

### **Introduction**

#### **Influence of firm size on choice of Entrepreneurial finance**

There are several theoretical reasons why firm size should be related to sources of entrepreneurial finance. Smaller firms may find it relatively more costly to resolve informational asymmetries with lenders and financiers, which discourages the use of outside financing and should increase the preference of smaller firms for informal relative to formal finance. However, this problem may be mitigated with the use of short-term debt (Grinblatt and Titman, 1998).

The literature includes some contradicting evidence on the relationship between firm's size and its financing strategies. On the positive side, Homaifar *et al.* (1994) conclude that large firms had more long-term debt and small firms had more short-term debt. Ozkan (1996) reports that smaller firms tend to have lower debt levels. Similarly, Ghosh *et al.* (2000) report a significant positive relationship between assets size and long-term debt ratio. Rajan and Zingales (1995) present an alternative argument for size that suggests that informational asymmetries between insiders in firms and the capital markets are lower for large firms. Accordingly, large firms should be more capable of issuing informationally sensitive securities like equity and should have lower debt levels.

However, in all four countries studied by Rajan and Zingales, net equity issuance by firms in the largest size quartile is significantly less than for firms in the smallest size quartile.

For entrepreneurial firms, Harrison *et al.* (2004) concluded that the size of the business as defined by the number of permanent employees, made a significant difference in how the business perceived the importance of bootstrap financing techniques applied. However, size, as defined by the number of employees was found by Gregory *et al.* (2005) as having significant correlations with ability to access certain sources of financing associated with bootstrapping strategies.

They suggested that smaller businesses place a greater importance on the application of bootstrapping techniques than larger businesses. Gregory *et al.* (2005) concluded that size, as dictated by the volume of annual sales generated, may not explain the ability to access finances, since both small and large businesses have different growth intentions and thus different capital requirements.

Pretorius (2007) conducted a study on bootstrapping financing as applied by South African entrepreneurs. In relation to size as defined by the number of employees, this study found a significant difference with regard to the importance of selected bootstrapping techniques, partially supporting the findings of Harrison *et al.* (2004) and Gregory *et al.* (2005). More significant was that in Pretorius' (2007) study, these techniques were perceived to be more important for the smaller businesses than for the larger businesses.

For size as dictated by volumes of annual sales generated, Pretorius (2007) findings supported those of Gregory *et al.* (2005) that these measure of firm size did not significantly explain the access to selected sources of entrepreneurial finance as elaborated by given bootstrapping techniques. In all these instances, these studies generated findings that only partially correlated with each other owing to methodological differences in the research designs. An example of these was the definition of SMEs based on the number of employee where Gregory *et al.* (2005) used large to stand for 500 employees and above while Pretorius (2007) used a narrower categorization scope.

In many developing countries, entrepreneurs have limited access to formal credit. In sub-Saharan Africa, for example, the banking-sector penetration is roughly 10% of the population (Stein, 2001). In Kenya, there are about 2.2 million micro-, small- and medium-sized enterprises (Strategic Business Advisors [Africa] Ltd, 2007), of which 88% are non-registered. Of this non-registered group, only 23% have bank accounts, and only 10% have ever received credit from any formal source. Atieno (1998) has observed in a survey done in Kenya that about 70% of the respondents got their initial capital from family, friends and relatives while 81% got their operating capital from the same financier.

Choice of source of capital is thus an on-going problem in the case of entrepreneurial firms (Bates and Nucci, 1989). Retained earnings are a major source of financing for mature, established firms. In some industries, in fact, it is the major source of financing. In contrast, entrepreneurial firms spend a tremendous amount of time hustling for sources of capital. Since entrepreneurial firms are rapid growth firms, their capital requirements typically outpace their ability to generate cash. Further, many entrepreneurial firms are unprofitable, particularly during their early years, and others do not generate sufficient profits to fund their own needs.

Ngehnevu and Nembo (2010) observe that new businesses have problems in getting a favorable position in the market. Their existence is determined by their size and age. As going concerns, it means they are capable of maintaining their size and even expanding. This makes the firm to gain legitimacy and thus be trusted as a successful business since it emits positive signals. Firms that are young and small face difficulty in acquiring resources for the proper functioning of business activities and they are always associated with external organizations in a vertical manner for support.

The integration of the young firm with a well-established one offers access to resources such as funding. Businesses employing this approach to gain creditworthiness are at risk since they are not independent although they may benefit from lower transaction costs due to increased economies of scale (Ngehnevu and Nembo, 2010). Given the small scale of entrepreneurial projects and a higher information asymmetry and higher risk, financial institutions find it costly to monitor small businesses, even if advances in technology (including the risk scoring techniques) imply that the banking sector is capable of handling the entrepreneurial finance better than in the past (de la Torre *et al.* 2008).

The use of external equity, in particular institutional venture capital, is marginal in the prevailing majority of countries. According to Bygrave (2003), formal venture capital tends to play a more significant role only for a very limited number of firms; while in contrast, sources of informal financing are accessible by all entrepreneurial ventures, regardless of their observable growth and innovation prospects. Ngehnevu and Nembo (2010) conducted an empirical study to assess the impact of Microfinance Institutions (MFIs) in the development of SMEs in Cameroon under the auspices of the Cameroon Cooperative Credit Union League (CamCCUL). They found out that early stage businesses were not easily granted loans. Most of them found it difficult to meet the requirements for servicing loans. The granting of loans was much easier for large compared to small firms. MFIs considered CamCCUL clients ability to repay debt and assess the minimal sum they could contribute as equity before offering a loan.

Existing firms were considered to have a history that could be quantitatively and qualitatively appraised by the MFIs before granting a loan. A bad history meant loan denial and a good history that the loan will be granted. A start up business does not have this history and MFIs do not rely on them because of the problem of information asymmetry. This is in confirmation with Ledgerwood (1999) that MFIs prefer to provide products and services to meet the needs of growing businesses since they are considered more reliable and less risky.

Venture capital investors have an advantage over angel investors in overcoming the information asymmetry and moral hazard problems because they have more information about the entrepreneur and firm. By the time VCs gets involved, the newly created firm has demonstrated the viability of the business and the use of previously obtained funds (possibly from angel investors). Angel investors have much less information about either the potential of the business innovation and/or the quality of the entrepreneur. These fundamental problems are even greater at the initial start-up phase. Indeed, these problems may be so great at start-up that much of the institutional financing may not be in the opportunity set. Entrepreneurs may have to turn to informal financing sources at initial start-up. Indeed, Vos *et al.* (2007) suggests that the entrepreneurs may prefer financing from these connected investors.

In view of the above review the following hypothesis was tested:

$H_{01}$ : Firms size does not influence the choice of source of entrepreneurial finance

### Methodology

The study adopted a descriptive and empirical survey research design. The population of interest was composed of all SMEs in Thika District registered in the Thika Business Directory. The sample comprised 259 SMEs drawn from the service sector, the trading sector and the manufacturing sector. The sample was selected using stratified random sampling techniques. Data was collected by administering questionnaires on the entrepreneurs.

The formulated hypothesis was tested using the chi-squared test and logistic regression at 5% level of significance.

### Results and Discussion

This section investigates the findings relating to the influence of firm size on choice of entrepreneurial finance.

**Table 1: Number of Employees Other Than Owner**

Min	Percentile				Max	Mean	Std Dev	Valid N
	25	50	75	95				
0	2.0	3.0	4.0	11.0	120	4.81	10.716	212

The mean value of employees per firm was 4.81 but with a high standard deviation value indicative of the fact that actual numbers of employees among most of the firms differed widely. From the percentile values, we see that roughly 75% of the firms had up to 4 employees other than the owners. Only a handful (less than 5%, had more than 11 employees other than the owners). This has the same implication for growth as cited earlier.

**Table 2: Estimate of Firms Assets**

Min	Percentile				Max	Mean	Std Dev	Valid N	
	25	50	75	90	95				
2000	100000	300000	700000	1.5M	3.55M	25M	1123419	3453238	225

A quarter of the respondent firms had assets in the range of KSh. 100,000, while up to half of the firms had estimated assets values of up to KSh. 300,000. Majority of the firms lay with the 75<sup>th</sup> percentile characterized by estimated assets values of KSh. 700,000. Roughly 5% of the respondent firms had assets estimated between KSh. 1.5 million and 3.55 million, while only a further 5% had estimated assets that exceeded 3.55M in value. The high standard deviation reflects this pattern of high dispersion about the mean value.

**Table 3: Average Gross Monthly Profit Last Five Years**

Min	Percentile					Max	Mean	SD	Valid N
	25	50	75	90	95				
1500	20000	40000	92500	200000	362500	4M	119946	388844	214

Most of the respondent firms registered profits below KSh. 100,000. These lay between the 75<sup>th</sup> and the 90<sup>th</sup> percentile. Less than 5% of the respondent firms registered profits in excess of KSh. 350,000. The high standard deviation figure indicates a wide dispersion about the mean of the distribution.

**Table 4: Influence of Size Parameters on Choice of Entrepreneurial Finance**

Size Parameters	SA (%)	A(%)	N(%)	D(%)	SD(%)
Staff no influence	18.7	23.3	9.6	35.2	13.2
Profit influenced	27.1	33.8	10.5	25.7	2.9
Age influenced	20.9	33.6	16.4	24.1	5.0
Sales no influence	8.1	16.2	21.2	41.0	13.5
Expansion influenced	9.5	18.5	29.7	36.9	5.4

Key: SA=Strongly Agree; A=Agree; N=Neutral; D=Disagree; SD=Strongly Disagree

The aim here was to determine how certain statements that related to the perceived effect of business size parameters on access to sources of entrepreneurial finance were ranked by the respondents. These include the number of employees, gross profit, the age of the business, the annual average turnover in sales of the business and the expansion of the business in terms of branches. The statements were structured so as to reflect either influence or no influence. The accepted responses were strongly disagree (SD), disagree (D), neutral (N), agree (A) and strongly agree (SA).

Majority of the respondents disagreed with the notion that the number of employees did not influence where the firm obtained its finance, with most of these (35.2%) registering disagreement. With respect to the issue of whether gross profit influenced where the firm acquired its finance, the majority opinion was that gross profit influenced access to entrepreneurial finance. Of these respondents, most (33.80%) were in agreement with that gross profit influenced access to entrepreneurial finance. One third of the respondents (33.60%) agreed that the age of business determined source of finance. Forty one percent (41%) of the respondents disagreed that annual average turnover in sales of business influenced the source of entrepreneurial finance. A majority of 63.1% agreed that the expansion of the business in terms of branches influenced where the firm obtained finance while 36.90% disagreed.

**Table 5: Mean Values of Size Parameters Influence**

Determinants of firm size	Mean	Std. Dev.	n
Sales volumes did not influence	3.36	1.147	222
Expansion influenced	3.1	1.069	222
Number of employees did not influence	3.01	1.368	220
Age of the entrepreneur determined	2.59	1.204	210
Profitability of the firm influenced	2.43	1.217	219
Valid n (list wise)			199

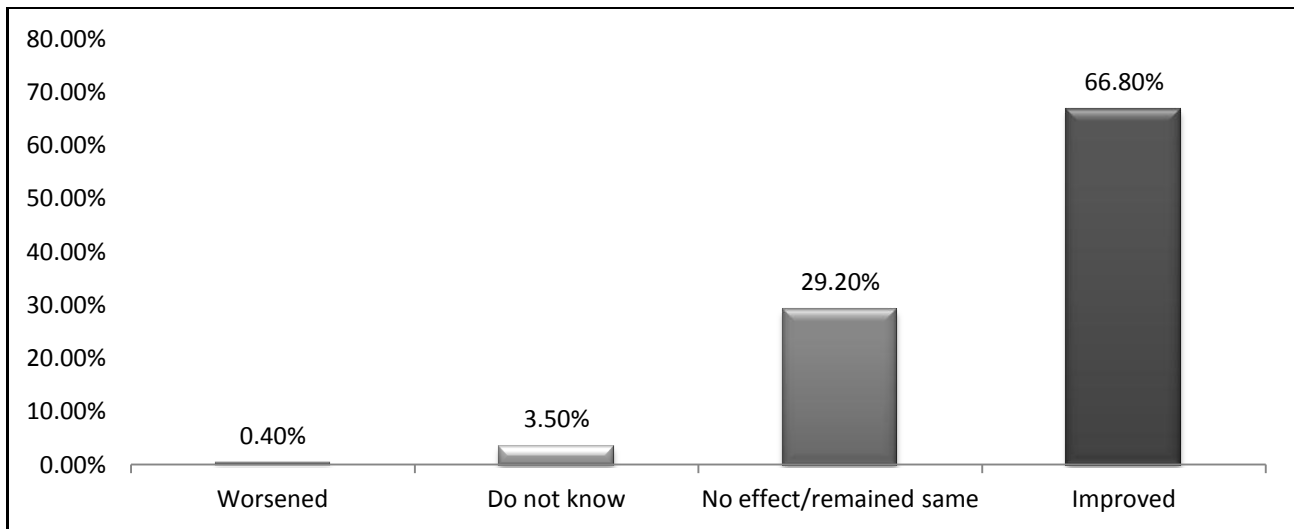
The mean values for each of the four statements are shown above. The mean values represent points of convergence of the different respondents opinions regarding the influence of the stated parameters on access to entrepreneurial finance. The measures inform the research on where most of the opinions tended to cluster around. The values were rounded off to the nearest integer and interpreted according to the points on the Likert scale that these corresponded to.

The statement ‘annual average turnover in sales of business did not influence the source of entrepreneurial finance’ as an assertion had an overall rating of ‘neutral’ on our scale (mean of 3.36). These means that there was no implicit influence of growth in sales on access to finance for the entire respondents, although for individual firms, the observation will vary widely as shown by the standard deviations. The same analysis is repeated for the other variables. When rounded off, and compared to corresponding points on the Likert scale, all the proxies that represented size except ‘profit’ were considered neutral. In the case of profit, the respondents registered general agreement in that gross profit influenced where the firm got its finances.

**Table 6: Effect of Business Size on Choice of Source of Entrepreneurial Finance**

Effect of Business Size	Frequencies	Percentage (%)
No Extent	66	28.9
Small Extent	7	3.1
Moderate Extent	39	17.1
Great Extent	106	46.5
Greatest Extent	10	4.4
<b>Total</b>	<b>228</b>	<b>100</b>

When asked to rate how business size in general has influenced entrepreneur’s decision on where to apply for entrepreneurial finance, a majority of 46.2% of the entrepreneurs responded that this consideration influenced them to a great extent. A significant proportion of 29.3% also felt that business size was not a consideration in deciding on where to apply for entrepreneurial finance. A moderate level of influence of size on financing was registered by 17.3% of the respondents. This distribution had a mean of 2.94 (moderate extent) and a standard deviation of 1.358.



**Figure 1: Effect of Business Size on Entrepreneurs Access to Sources of Finance**

The majority of the respondents (66.80%) were of the opinion that the size of the business improved the entrepreneur’s ability to access sources of financing. A smaller, but still significant number (29.20%) reported no effect with regard to the effect of size on their ability to access sources of financing. The distribution had a mean value of 1.41 (corresponding to improve on the measurement scale) and a standard deviation of 0.682 which represented a fairly high clustering around the mean.

Thus, respondents generally shared the opinion that size improved their access to sources of entrepreneurial finance.

**Test of Hypothesis**

In relation to firm size and growth, the null hypothesis was

H<sub>01</sub>: Firm size does not influence the choice of source of entrepreneurial finance.

The alternative hypothesis would be that these distributions are different. Pearson's Chi Square did not reveal any statistically significant correlations between firm size and SMEs choice of sources of entrepreneurial finance. The multiple logistic regression models also did not yield any relationship between these two variables. The study thus failed to reject the null hypothesis  $H_{01}$ . It was therefore concluded that firm size had no effect on the entrepreneur's access to and choice of sources of entrepreneurial financing.

### **Conclusion**

Firm size had no influence on the entrepreneur's access to debt or equity sources of financing. The conclusion that can be made here is that the SMEs were not constrained by size in their ability to access their choice of source of entrepreneurial finance, debt or equity. This is an encouraging thought, given that some entrepreneurs actually recommended the same. In a few instances, their recommendations seemed to suggest that certain financiers do look at firm size, but these were not significant. Preliminary analysis suggested that profitability did have an influence on lenders perception, so it would help if the firms could enhance their profitability to tap into this link with source of financing.

### **Recommendations**

This study recommends that firms should focus on size in terms of increased profitability as a means of improving their ability to access their choice of sources of entrepreneurial finance. Profit did have some influence on where an SME obtained finances although the findings were not significant in this study. By leveraging on profit, it is possible to convert this into a significant fact that would attract funding. Internal efficiencies must be embraced to minimize waste that increase operating costs and reduce profitability. In this way, SMEs, irrespective of size, are able to optimize their financial and operating ratios which enable them to support higher levels of debt and equity funding.

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