

THE EFFECTS OF ENTREPRENEURIAL AND FIRM CHARACTERISTICS ON PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN PRETORIA

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Abstract

The primary aim of this study was to analyze the effects of entrepreneur and firm characteristics on performance of small and medium enterprises (SMEs) in Pretoria. Based on simple random sampling procedures, a total of one hundred and fifty students were selected and participated in the survey. A structured questionnaire was used to collect data on entrepreneur and firm characteristics affecting performance of SMEs. The data were sought and analysed using SPSS statistical package. The Cronbach's alpha of 0.885 and the Keiser-Meyer-Olkin of 0.872 were obtained from the data used for the analysis. Based on the findings derived from multiple regression analysis using the ordinary least squares regression; managerial competence, educational qualifications, work experience, location, size of the firm, period the enterprise has operated and business sector all have significant positive effects on performance of SMEs.

Keywords: SMEs, entrepreneurial characteristics, firm characteristics, performance

INTRODUCTION

In today's rapidly growing and dynamic competitive global economy, small and medium enterprises (SMEs) have increasingly become a powerful engine for economic growth and development (Islam, Khan, Obaidullah & Alam, 2011). Most governments in numerous emerging economies across the world have realised the important contribution made by SMEs towards achievement of sustainable growth, employment and poverty reduction (Swerczek & Ha, 2003). In South Africa, a study by Abor & Quartey (2010) estimates that 91 percent of formal business entities in the country are SMEs; and such SMEs contribute between 52 to 57 percent to GDP and accounting for about 61 percent to employment (NCR, 2010). Given that research on performance of SMEs has dominated the center stage in the arena of industrial

development (Akhtar, 1999), the importance of SMEs performance cannot be over emphasized; especially in such today's global economy characterised by rising trends of industrialization.

In an effort to enhance development of SMEs, increasing numbers of public, private and academic institutions have extended considerable support to SMEs across various industrial sectors (Staddard, 2006). To make such support successful, the investigation of factors affecting performance of SMEs has broadened from largely focusing on institutional arrangements alone, but also on the effects entrepreneur and firm characteristics have on performance of such SMEs (Woldie, Leighton & Adesua, 2008). Survey literature indicates that entrepreneur characteristics with effects SMEs performance include gender, age, education, work experience, and managerial competence (Mahmoud, 2011); while firm characteristics include period SME has been in business, size of SME, source of capital, sector and location (Khan, Obaidullah & Alam, 2011).

Research Problem

Although several new SMEs are being established in the South African economy (Baron, 2003), but the alarmingly high rate of failure in this segment has become a serious cause for concern to industrial development stakeholders (Cornwall & Naughton, 2003; and Santrelli & Vivarelli, 2007). According to the Small Business Development Agency (NCR, 2011), indicate that eight in every ten new businesses fail within their first five years of operation.

Research Objective

To analyze effects of entrepreneur and firm characteristics on performance of SMEs

Contribution of the Study

Given the importance of the contribution SMEs have towards national output, poverty reduction via employment creation and social development, the results of this study will yield useful insights on the magnitudes to which entrepreneur and firm characteristics affect SMEs success. Such results will help the relevant stakeholders implement intervention measures that will help enhance performance of SMEs in the economy.

LITERATURE REVIEW

Numerous empirical studies of factors influencing performance of SMEs can generally be conducted from two approaches; either by focusing on a quite limited set of variables at firm level or by incorporating a broader framework that covers the external environment. Following the survey approach adopted by Duh (2003), the primary factors explored to be significant in

affecting their performance of SMEs included owners' or managers' characteristics; enterprise characteristics and the contextual elements of SMEs development. From a management perspective, the concept of performance often refers to the enterprise's financial performance. However, there is no universally accepted definition of performance and as such; business performance is interpreted in numerous ways from various dimensions (Foley & Green 1989). Different dimensions that are covered by performance include survival, profit, sales growth and number of employees.

Based on the findings from previous research, the factors affecting performance of SMEs can be categorized into entrepreneur characteristics (Kristiansen, Furuholt, & Wahid, 2003), enterprise or firm characteristics (Kristiansen, Furuholt & Wahid; 2003), management and know-how (Swierczek & Ha, 2003), customers and markets (William, James, & Susan; 2005), resources and finance (Swierczek & Ha, 2003), and external environment (Indarti & Langenberg, 2005). According to Mascherpa (2011), the entrepreneurs' demographic profiles have a positive effect on the performance of SMEs. Moreover, Fairuz, Hirobuni, & Tanaka (2010) indicate that there exist positive correlations between entrepreneurial proactiveness and business performance.

Adnan, Abdullah & Ahmad (2011) reported that human resources management practices do have significant effects on Malaysian firms' bottom line performance; which indicated that management practices used in the enterprise are a significant factor influencing performance of the business. Islam & Siengthai (2010) indicated that most of the core processes of human resource management; particularly recruitment and selection, performance appraisal, training and development have a positive impact on firm performance. From a marketing perspective, Cacciolatti, Fearn & McNeil (2011) indicate that SMEs that make good use of structured marketing information in conjunction with good marketing strategies present a higher chance of growth. Furthermore, Mahmoud (2011) conclude that the higher the level of market orientation, the greater the level of performance of Ghanaian small and medium enterprises. The study of Keh, Nguyen & Ng (2007) shows a significant positive relationship between information utilization and performance of the firm.

With regards to age, a study by Reynolds et al. (2000) found that individuals ranging from 25 to 44 years old were the most successful entrepreneurs. Another study in India by Sinha (1996) revealed that successful entrepreneur was relatively younger in age compared to the old ones.

In another study by Kristiansen, Furuholt & Wahid (2003) on Internet cafe entrepreneurs in Indonesia, a significant correlation was found between age of the entrepreneur and performance of the SMEs. The SMEs that were operated by entrepreneurs who were twenty

five years old and above were more successful than the younger ones. In respect of business management experience, Kolvereid (1996) found that business that were run entrepreneurs with prior entrepreneurial experience scored significantly higher performance levels than those without such experience.

In another study by Cragg & King (1988); Rutherford & Oswald (2000) small business performance was classified into three categories of antecedents; namely entrepreneur characteristics, firm characteristics and environmental characteristics. The entrepreneur characteristics covered age, education, managerial competence and industry experience. Charney & Libecap (2000) found that entrepreneurship education produces self-sufficient successful enterprising individuals. Furthermore, the study found that entrepreneurship education increases the likelihood of SMEs success. In a similar study by Sinha (1996), the effect of educational background on enterprise performance was analysed and the study found that 72 percent of the successful entrepreneurs had a minimum level of technical qualification, whereas approximately 67 percent of the unsuccessful entrepreneurs did not have any technical educational qualification.

From the dimension of firm characteristics, factors that affect performance of SMEs include length time an enterprise has been continuously operating, size of the enterprise, sector and source of capital (Smallbone, Leig & North, 1995). Kristiansen, Furuholt & Wahid (2003) found that length time in operation had a significant effect on business success. Moussavi (1988) stated that experience on the part of the owner or manager had a significant contribution on performance of small and medium size enterprises.

Furthermore, Westhead et al. (1995) on their study on new small firms found that successful firms with more than one shareholder when it was set up were significantly more likely to survive than firms with few or no shareholders. In respect of size of the enterprise, McMahon (2001) found that enterprise size had a significant effect performance of small and medium enterprise success.

METHODOLOGY

The Study & Sampling

The population for the research survey was small and medium size enterprises in Gauteng province; South Africa. The respondents represented the four broad categories of SMEs; namely construction, retailing, manufacturing and tourism sectors. Following initial application of purposive sampling technique, simple random sampling further conducted to select 185 SMEs in the respective four sectors.

Research Instrument and Data Collection

The source of data for the study was primary data collected through use of a structured questionnaire. The questionnaire gathered data on students' level of agreement regarding the extent to which specific factors determine their choices for bank selection. The data on the perceived performance of SMEs was gathered using five point Likert scale questions anchored by Very Low to Very High in the range: Very Low (VL=1) to Very High (VH=5).

Data Analysis

The results of the survey were analyzed using descriptive statistics and correlational techniques. The data gathered was sought and analyzed using SPSS version 21 statistical package. Prior to conducting least squares regression, the Cronbach's alpha and KMO tests were undertaken to determine scale reliability; validity of instruments and suitability of the sampling size; respectively. The least squares regression was conducted to analyse the effects of distinct and overall effects of entrepreneur and firm characteristics on performance of SMEs.

ANALYSIS & FINDINGS

Scale Reliability

Reliability analysis was applied to measure consistency and internal stability of data. The Cronbach's Alpha was computed to determine the inter-item consistency and reliability of how well items in a set were positively correlated to one another.

Table 1: Scale Reliability of Total Items

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.885	0.841	8

The value of the Cronbach's alpha (= 0.885) indicate that the survey items are statistically reliable; thus the items measured a single unidimensional latent construct. Thus, the data that were collected for this research survey were considered internally stable and consistent.

Validity of Items

The structural validity and suitability of the sampling items was analyzed using the Keiser-Meyer-Olkin (KMO=0.872); which was statistically significant for the analysis.

Table 2: KMO and Bartlett's Test

Keiser-Olkin-Meyer Measure of Sampling Adequacy	.872
Bartlett's Test of Sphericity	Approx. Chi-Square
	df
	Sig.
	371.566
	24
	.000

The Bartlett's test of sphericity of the research items of 374.574 ($p < 0.001$) confirms that data on entrepreneur and firm characteristics was suitable for further analysis. Moreover, the determinant of 0.003 also indicates that the scale observed is one dimensional; thus the items are not an identity matrix.

OLS Regression Results

Overall, the estimated model indicated that about 88.5 percent variation in performance of SMEs was accounted by the period in which SMEs have been in business, educational qualification of entrepreneur, size of the firm, sector of the firm, location of the firm, experience of the entrepreneur and managerial competence. The model's F-test value (= 138.734; significant at 0.05 level) also indicated that the model was highly significant.

Table 6: Coefficients^a

Model	Standardized	t -statistic	Significance	90% Conf.	
	Coefficients			Interval for B	
	Beta			L.B	U.B
(Constant)	-----	1.859	0.065	-0.012	0.395
Period in business	0.180	4.770	0.000	0.0393	0.224
Education	0.205	6.269	0.000	0.097	0.187
Size of firm	0.157	4.278	0.000	0.058	0.157
Sector of firm	0.136	3.485	0.001	0.048	0.175
Age of entrepreneur	0.058	1.751	0.082	-0.007	0.112
Location	0.154	4.654	0.000	0.055	0.135
Experience	0.200	5.490	0.000	0.081	0.172
Managerial competence	0.266	6.585	0.000	0.117	0.217
Adjusted R ² = 0.885					
Durbin-Watson = 2.112					

a. Dependent Variable: Perceived performance

Based on the standardized results, the period in which SMEs have been in business, educational qualification of entrepreneur, size of the firm, sector of the firm, location of the firm, experience of the entrepreneur and managerial competence all have statistically significant positive effects on performance of the SMEs. Managerial competence and education had the

highest statistically significant positive effects on SMEs success; followed by experience, period of enterprise in business, location of firm, size of the firm and sector of the firm; respectively. Also, age of the entrepreneur was found to have a statistically insignificant positive effect on SMEs success.

CONCLUSION AND RECOMMENDATIONS

The objective of this research was to investigate the effects of entrepreneur characteristics and firm characteristics on performance of small and medium size enterprises in Pretoria District. The results confirmed that the period in which SMEs have been in business, educational qualification of entrepreneur, size of the firm, sector of the firm, location of the firm, experience of the entrepreneur and managerial competence all have statistically significant positive effects on performance of the SMEs. Managerial competence and education had the highest statistically significant positive effects on SMEs success; followed by experience, period of enterprise in business, location of firm, size of the firm and sector of the firm; respectively. The findings that entrepreneur and firm characteristics have statistically significant positive effects on performance of SMEs in Pretoria province imply that small and medium size enterprises should improve their educational qualifications and managerial competences in their respective business operations. They should also choose strategically competitive areas for location of their businesses in order to sustain competition in the market. Improvements in working experience by entrepreneurs are also a necessary ingredient for enhancing performance of small and medium enterprises. It is imperative to highlight that the study limited its focus on the effects entrepreneurial and firm characteristics on performance of SMEs. In a bid to improve results of a study of this nature, future studies should examine the impact of external environmental factors such as politics, legislation, demography, natural environment and technology have on SMEs' performance.

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