Abstract

There is growing recognition of the important role SMEs play in economic development. SMEs are often described as efficient and prolific job creators, the seeds of big businesses and the fuel of national economic engines. SMEs make substantial contributions to the Ghanaian economy in terms of output, job creation, income generation and effective utilisation of resources. In view of these contributions, SMEs are at the heart of the country’s strategy aimed at making Ghana competitive and dynamic knowledge-based economy. This study investigated the effect of level of education and business experience of owner/managers on the performance of SMEs in the Accra Metropolis of Ghana. The objective of this study was to ascertain whether owner/managers’ level of education and years of experience are significant variables that affect the performance of the business. A multi-method approach employing both quantitative and qualitative research methodology was utilized. Structural equation modelling using partial least squares was employed to examine these effects. The findings indicated that the level of education and business experience of owner/managers has no significance on the performance of SMEs in the Accra Metropolis.

Keywords: Level of Education, Business Experience, Performance, Small and Medium-Size Enterprises, Ghana

1. Introduction

The quest for the promotion of Small and Medium-Scale Enterprises (SMEs), and the rise of political-economy concerns over the lack of industrialisation in developing countries dates back to the mid-twentieth century. For much of the period, however, industrialisation policies were premised on the segmentation between large and small-scale producers. Macroeconomic and sector policies were designed accordingly (Erikson & Sorheim, 2005). The idea of SME promotion has been in existence since 1970 though very little was done at the time.

Key institutions were set up to assist SMEs and prominent among them were the Office of Business Promotion and the present Ghana Enterprise Development Commission (GEDC). The main objective of GEDC was to assist Ghanaian businessmen to enter into fields where foreigners mainly operated. It also had packages for strengthening small-scale industry in general, both technically and financially (Kayanula & Quartey, 2000; Mensah, 2002). SMEs have been defined differently by many scholars owing to differences arising out of contexts. However, what is frequently used include characteristics such as the number of employees, annual turnover and the enterprise’s net worth (Mensah, 1996). SME for this study was defined as businesses with number of employees between 0 and 100 (Amarteifio, 2014).

Level of education and business experience are two vital determinants of business performance (Amarteifio, 2014). The impact of level of education and business experience on business performance of an owner/manager has been the subject of much discussion and speculation in both the popular and academic press. If education leads to a higher quality of entrepreneurial performance, this justifies appropriate investments in education. Most of the previous studies have being done either to find the relationship between education and business success or business experience and business success (Wanigasekara & Surangi, 2010). Further the SME sector is an important contributor to the economy. It is important to examine the effect between the owner managers’ education, business experience and their business performance.

Efforts targeted at the SME sector are often based on the premises that SMEs are the engine of growth, but market imperfections and institutional weaknesses impede their growth. Skeptics question the efficacy of this policy and point to empirical evidence either in favour of large firms or of a size-blind policy approach (Biggs, 2000). Staw (1991) suggested that owner
managers of SMEs with vast experiences in managing business are more capable of finding ways to open new business compared to employees with different career pathways.

The importance of business experience and level of education for SME performance is also underscored by other experts. Studies have generally found that SME owner/managers with more managerial, industry experience or prior SME experience as owner/manager tend to correlate with greater growth (Storey et al., 1989).

A study carried out by Hall (2000) found that SME owner/managers in the UK with little experience at the start-up phase could have problems remaining solvent with an increase in expenditure in relation to their earnings. Kalleberg and Leicht (1991) in their study found no relationship between prior SME experience and firm growth. Storey (1994) found reasonable evidence indicating a negative relationship between being unemployed before starting a business and subsequent business growth. Also firms operating in mature industries have to cope with competitive situations that require an objective assessment of threats and opportunities as well as the generation of new alternatives to survive. A higher level of education has been associated with more proactiveness and risk taking and greater openness to change and innovation (Wally & Becerra, 2001).

There is no question as to the fact that basic education enhances the overall quality of the owner/manager by providing him/her with basic numeric and literacy skills, thus increasing the chance of survival (Carter & Jones-Evans, 2000). Some studies state that the fact that a manager has a higher education degree or even a postgraduate degree seems to stimulate the performance of the firm. The converse argument is that owner/managers of SMEs who had degrees generally achieved lower rates of growth than those less well educated (Hall, 2000). This study therefore examines the relationship between the level of education and business experience on business performance of owner managers in the Accra Metropolis.

1.1 Hypothesis of the Study

Two hypotheses were constructed for this study;

1) Owner/managers’ level of education has a positive effect on performance of SMEs in the Accra Metropolis

2) Owner/managers’ business experience has a positive effect on performance of SMEs in the Accra Metropolis

2. Effect of Level of Education on Performance

Some of the knowledge useful to owner/managers in running their businesses can be obtained from formal education. A number of empirical studies have examined the effect of education on performance (Coleman, 2004; Kangasharju & Pekkala, 2002; Saffu et al., 2006). Higher levels of education provide higher levels of human capital for the firm. The educational achievement of owner/managers is associated with their persistence, motivation, and self-discipline (Bird, Sapp, & Lee, 2001). These qualities, in turn, might be expected to increase SMEs’ ability to perform. The influence of education on performance lies in the fact that knowledge gained enhances the managerial capacity to develop a superior business in general or an industry-specific strategy (Honig, 1998; Kim et al., 2006; West & Noel, 2009). Consequently, resources can be acquired more efficiently, costs are reduced, and revenues are increased. In short, performance improves.

Education is presumably related to knowledge and skills, motivation, self-confidence, problem solving ability, commitment, and discipline (Bird, Sapp & Lee, 2001).

Higher education could be expected to increase owner/managers’ ability to cope with problems and seize opportunities that are important to the growth of SMEs. Yusuf and Saffu (2005) did not find a significant relationship between education and performance in their study of Ghanaian owner/managers. This is because, in contrast to the situation in professional sectors such as medicine, accounting, law, engineering, and consulting, higher education is not a necessary requirement or a common characteristic of owner/managers in the trading sector.

Blackwood and Mowl (2000) raised the issue that the area of owner/managers’ education may not be related to the type of business in which they are involved. In this case, education is not likely to have a significant effect on performance. These mixed findings is explained by Thibault (2001), who indicated that owner/managers vary greatly in terms of education level. Some successful owner/managers are highly educated whereas others have yet to complete their high school diplomas. They suggest that success may depend on the individual himself/herself and the way he or she manages the business.

Nevertheless, a number of researchers have found a positive link between the educational level of owner/managers and firm performance. In a study of Finnish entrepreneurs, Kangasharju and Pekkala (2002) found that more highly educated owner/managers’ SMEs have higher growth rates. A study by Pena (2002) of Spanish firms found that the education level of owner/managers has a positive effect on firm performance. Coleman (2004) and Papadaki and Chami (2002) also reported the same result in a study of United States and Canadian firms respectively.

2.1 Effect of Owner/managers’ Experience on Performance

Owner/Managers’ experience, notably gained through familiarity with the industry/market, leadership ability,
and the ability to evaluate and handle risks, is a key factor determining business decisions. A number of studies have repeatedly reported the significance of the relationship between owner/managers’ experience and business performance (Cron, Bruton, & Slocum, 2006; Fasci & Valdez, 1998; Silversides 2001; Sinha, 1996). In their study of owners of accounting practices of the American Institute for Certified Public Accountants, Fasci and Valdez (1998) indicated that owner/managers’ work experience was strongly related to firm performance. In a related study, Watson (2002) explored the performance of female- and male-owned SMEs in Australia. These businesses were studied by examining output measures (sales and profit) while relating them to appropriate input measures (total assets and total equity). The businesses were compared on their return on equity, return on assets, and total income to total assets.

Cron, Bruton, and Slocum (2006) showed that there is a significant relationship between managerial experience and firms’ performance. They suggested that such experience allows owner/managers to build a well-endowed network which is important to the success of the firm. Saffu et al. (2006) and Cooper, Gimeno-Gascon, and Woo (1994) contended that entrepreneurial experience is conducive to firms’ performance. However, no relationship between entrepreneurial experience and performance was found in the study of Saffu and Manu (2004) in the Ghanaian context. They explained that this was not a surprise finding given that 81.5 percent of respondents had no previous entrepreneurial experience and the current business was their first venture.

There are three types of business experience: general experience, industry experience, and entrepreneurial experience (Bosma et al., 2004; Larson & Clute, 1979). General experience is owner/managers’ experience in general, such as experience from education and experience as an employee. Industry experience refers to owner/managers’ experience in the specific industry. Entrepreneurship experience is owner/managers’ experience in ownership or activities relevant to business ownership, such as earlier experience in starting up a business and membership of an association for small business founders (Bosma et al., 2004). It has been widely established that there are links between these three types of owner/managers’ experience and performance of SMEs. From literature, industry specific experience appears very important for entrepreneurial success. Many studies including Phillips (2002) and Agarwal et al. (2004) find those spin-off entrepreneurs are more likely to survive than other entrepreneurs.

2.2 Assessing Performance in Small and Medium Enterprise

Conventional economic performance assessment can be carried out using a dynamic measure – principally firm-level total factor productivity growth or a static measure – such as an annual cost-benefit ratio, output-labour ratio, output-capital ratio, job created, capacity utilization, profit-capital investment ratio and price-cost margin. However, for small businesses, it is rare to see dynamics measures – involving comparison between data for at least two time periods, and cost-benefit applied due to inadequate data. Only about 25% of SMEs keep records (Mensah, 2000).

However, models developed for large enterprises seem not to apply well to SMEs (Storey, 1994; Cassell et al., 2001, Mensah, 2002), as confirmed also by the gap between theory and practice observed by numerous authors in SME (Hudson et al., 2001; Sousa et al., 2006; Cocca & Alberti, 2008). Therefore, there is a need to establish the relevance of existing performance measurement approaches for SMEs and to identify an appropriate process for the design and implementation of strategic performance measurement systems in this context (Hrebiniak, Joyce & Snow 1989; Rodsutt & Swierczek, 2002). A review of literature identifies four major approaches to describing performance: the goal approach, the systems resource approach, the process approach, and the constituency approach (Ford & Schellenburg, 1982). Therefore, none of these conceptual approaches is superior to the others, and each will be appropriate depending on the type of study being conducted. Lachman and Wolfe (1997), however, note that the goal approach is one of the dominant performance approaches still used currently.

Performance measurement has tended to be restricted to frameworks and theories drawn primarily from the discipline of economics (Jarvis et al., 2000). The measures of performance used often emphasise profit maximisation using indicators such as profit margins, sales growth, return on investment, and return on assets, as this is considered to be the goal generally pursued by most owner/managers (Palepu, Healy & Bernard, 2000; Schutjens & Wever, 2000). Jarvis et al. (2000) regarded cash flow as a surrogate for financial performance as it is a key indicator of survival. It facilitates survival and reflects the importance of liquidity to small firms. McCracken, McIwain and Fottler (2001) subjective measures were appropriate substitutes for objective measures where accurate objective measures of performance were not available, and were also useful in operationalising non-financial dimensions of performance. Based on the evidence discussed above, the criteria used to capture SME performance in this study relate to the attainment of both financial and non-financial goals. Profitability, sales growth, and return on assets are frequently used as operationalisations of firm financial goals. Lifestyle, independence, and job security are measures widely used in previous studies to capture non-financial goals (Sarapaivanich, 2002) and these were used in this study to capture non-financial goals.

3. Research Methodology

The study area was the Accra Metropolis of the Greater Accra Region of Ghana, which covered a total land size of
200 sq. km. The target population for the study was all SMEs in the Accra Metropolis and the accessible population was defined as all manufacturing and trading SMEs which had registered with the National Board for Small-Scale Industries (NBSSI) in the Accra Metropolis as at July, 2010. The total number of businesses recorded in the NBSSI’s register by location in the Metropolis was 3,474. The population was classified using the 11 sub-metropolises. Given that the population is 3,474, it was logical to determine a sample for the study. Sarantakos (2005) and Krejcie and Morgan (1970) consider that a sample size should be determined either by direct calculation using statistical formulas appropriate to the nature of the study or by reference to tables which set out recommended sample sizes for given populations.

Based on the table developed by Krejcie and Morgan (1975), with a population size of about 3500 and to ensure a 5 percent margin of error, the sample size should be 346. However, to ensure an increase in internal and external validity, a sample of 500 SMEs was selected for this study. Stratified sampling was used to select the sample from each sub-metropolis. Both primary and secondary data sources were used for the study. The data was collected through the use of questionnaire and focus group discussion guide. The instruments used in this study were questionnaires to owners and managers of SMEs and a focus group discussion for members of Ghana National Chamber of Commerce and Industry. The questionnaire consisted of both open-ended and closed-ended questions. Structural equation modelling using partial least squares was employed to test the hypotheses in this study.

4. Results

The results from the descriptive statistics on business characteristics covering the form of business ownership, types of business, business areas, number of employees, and industry of operations based on the number of years. Of the 500 respondents, 280 were males representing (56%) and 220 were females representing (44%). The majority of the SMEs were sole proprietorship (91.8%), and a few of them were partnership (6.2%). 9 out of 500 SMEs were Companies representing (2%). The predominance of sole proprietorships over other legal forms of business may be due to the fact that they have fewer legal and tax requirements than partnerships or companies. Sole proprietorships provide owner/managers with independence in making decisions. SMEs in Accra Metropolis are male dominated (56%), also firms that were organised as companies were mostly male dominated. Out of 10 companies, 9 were male owned and only one was female owned. Thus, there were marked differences between males and females in the legal structure of business formation ($\chi^2 = 13.4108$: p-value = 0.001). A large percentage of SMEs in the sample were into trading type of business (93%). Only 23 SMEs out of 500 respondents were into manufacturing of which female-owned managers were more than the male-owned managers. The service industry was made up of 2.4 percent. There were no differences between males and females in the types of business ($\chi^2 = 4.2394$: p-value = 0.120).

4.1 Experience of owner/managers

Owners/managers included in the sample have been in their businesses for various lengths of time. Table 1 shows that the majority of owners/managers (68.9%) have managed their business for not more than 10 years. Only 31 percent have been able to manage their business for 10 years. These findings imply that even though a number of owner/managers start their businesses, several of these businesses do not survive. Only 1.3 percent of the businesses survived after 30 years. About 21 respondents did not provide any answer for this question.

Table 1: Owner/manager experience

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
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<tbody>
<tr>
<td>1-10</td>
<td>330</td>
<td>68.9</td>
</tr>
<tr>
<td>11-20</td>
<td>111</td>
<td>23.2</td>
</tr>
<tr>
<td>21-30</td>
<td>32</td>
<td>6.7</td>
</tr>
<tr>
<td>more than 30</td>
<td>6</td>
<td>1.3</td>
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<tr>
<td>Total</td>
<td>479</td>
<td>100.0</td>
</tr>
</tbody>
</table>

N=500, missing cases, 21
Source: Field study, 2013

4.2 Level of education of owner/manager

Table 2 shows the different educational levels of the owner/managers surveyed. About 64 percent of owner/managers had a form of higher education (senior high school and tertiary). According to Kim and Staw (1991) and Katz (1992), owners/managers with higher levels of education are more successful because higher education provides them with knowledge and modern managerial skills, making them more conscious of the reality of the business world and thus in a position to use their learning capability to manage business. Only 1.4 percent of the respondents had no education, the rest of the respondents had completed primary school and junior high school respectively.

Table 2: Level of education of owner/manager

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percent</th>
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<tbody>
<tr>
<td>No education</td>
<td>7</td>
<td>1.4</td>
</tr>
<tr>
<td>Primary education</td>
<td>19</td>
<td>3.8</td>
</tr>
<tr>
<td>Junior high school</td>
<td>155</td>
<td>31.1</td>
</tr>
<tr>
<td>Senior high school</td>
<td>221</td>
<td>44.4</td>
</tr>
<tr>
<td>Tertiary</td>
<td>96</td>
<td>19.3</td>
</tr>
<tr>
<td>Total</td>
<td>498</td>
<td>100.0</td>
</tr>
</tbody>
</table>

N=500, missing cases, 2
Source: Field study, 2013
Owners/managers’ area of educational specialisation was analysed. Only 28.8 percent of the owners/managers had knowledge in Business or studied Business in school prior to starting their enterprise. 23.0 percent had some Vocational or Technical training, whereas for Arts (12.6%) and Science (9.3%). 26.3 percent of owners/managers of SMEs in Accra Metropolis did not have any formal education in any of these fields. They did not go beyond Junior High School.

4.3 Performance

The results of owner/managers’ satisfaction with performance surrogates and the level of importance attached to the performance surrogates are presented in Table 3.

<table>
<thead>
<tr>
<th>Table 3: Satisfaction with the firm’s performance</th>
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<tbody>
<tr>
<td>Satisfaction with</td>
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<td>-------------------</td>
</tr>
<tr>
<td>Profitability</td>
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<tr>
<td>Growth in sales</td>
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<tr>
<td>Return on assets</td>
</tr>
<tr>
<td>Cash flow</td>
</tr>
<tr>
<td>Life style</td>
</tr>
<tr>
<td>Independence</td>
</tr>
<tr>
<td>Job security</td>
</tr>
</tbody>
</table>

As indicated in Table 3, respondents were most satisfied with the level of independence (3.31) associated with operating their business, followed closely by job security (3.29) and lifestyle (3.27). Satisfaction with return on assets had the lowest mean index of 2.44. This finding is in line with those of the study by Jennings and Beaver (1997) and Boohen (2010), which suggested that owner/managers strive to achieve more in non-financial rewards such as independence and job security than in financial rewards. Table 4 indicates that business stability had the highest mean index of 4.67, followed by income to look after family (\(\bar{x} = 4.52\)) and profitability and growth in sales accounting for 4.32 and 4.28 respectively. The table reveals that owner/managers pursue a range of goals, and that making money is not necessary a primary goal. Creating jobs and community development had the lowest mean indices. Creation of jobs seems not to be among the prime goals of small businesses.

<table>
<thead>
<tr>
<th>Table 4: Level of importance of firm’s performance</th>
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<tbody>
<tr>
<td>Level of importance</td>
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<td>----------------------</td>
</tr>
<tr>
<td>Profitability</td>
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<tr>
<td>Growth in sales</td>
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<td>Return on assets</td>
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<tr>
<td>Cash flow</td>
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4.4 Influence of Level of Education and Experience on Performance of SMEs in Accra Metropolis

The path coefficient for the relationship between education and performance is not significant, as the t-value is less than 1.28. Education has no significant influence on performance. This may be due to the fact that a large number of respondents have a reasonable level of education - high school and above.

The relationship between experience and performance is supported as the t-value of the relationship between experience and performance is significant at 0.10 level. This value indicates that the theoretical relationship specified was supported by the data. Owner/managers’ experience has significant effect on performance.

<table>
<thead>
<tr>
<th>Table 5: Path Coefficient, t-statistics and p-values of Investment Readiness and Performance</th>
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<tbody>
<tr>
<td>Path between Unobserved Variables</td>
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<tr>
<td>-------------------------------------</td>
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<tr>
<td>EDU → PERF</td>
</tr>
<tr>
<td>EXP → PERF</td>
</tr>
</tbody>
</table>

5. Discussions and Conclusions

5.1 Owner/managers’ education has a positive effect on the performance of SMEs

This hypothesis was not supported. The finding was surprising given that past research indicates that higher education is associated with higher business performance (Bates, 1997; Mitra & Matlay, 2004; Parker, 2004). Nevertheless, it is consistent with the suggestions of Panpiamrat (2005) that the performance of SMEs does not depend on the educational level of owner/managers. He pointed out that owner/managers need to have knowledge that enables them to understand their businesses. This knowledge cannot be gained only from formal education but also from training on-the-job. Thus, irrespective of their educational levels, owner/managers have to seek practical knowledge relevant to their businesses by continuously reading and listening to experts, attending seminars and learning from other people’s experiences. Roberts-Lombard and Chilliya (2012) hinted that many owner/managers lack time, resources,
technology or expertise to research and develop new business ideas and innovations.

In addition, education may not assist performance where the area of owner/managers’ education is not related to their businesses. Only 29 percent of respondents read business. According to Blackwood and Mowl (2000), education will not contribute to business performance where the owner/managers’ area of specialisation is not related to the type of business in which they are involved. Finally, this finding may be explained by the fact that the majority of respondents in this study (64%) had a base education level of high school and above, which should be adequate to operate a business successfully. In other words, higher education will be unlikely to provide a significant performance advantage.

5.2 Owner/managers’ experience has a positive effect on the performance of SMEs

Mazzarol, Volery, Doss and Thein (1999) and Bosma et al. (2004) reported that experience has a significant impact on performance, this finding was not significant in this study. The potential explanation for this is that the number of years that owner/managers have operated their businesses may not be the only type of experience needed to enhance their business performance. Findings from this study show that majority (40%) of owner/managers have owned and managed their business for not more than 5 years. Jovanovich (1982) finds that while smaller and younger businesses grow faster than larger and older businesses, smaller and newer businesses on the other hand are less likely to survive than larger and older businesses because its owners are not experienced. The finding that owner/managers’ experience has no influence on performance is in keeping with the findings of Papadaki and Chami (2002) who observed that among small businesses, older businesses grow faster than younger ones.

References


