Determinants for the Growth of Small and Medium Enterprises in Ethiopia: A Case of Derash Woreda, Gidole Town, Southern Ethiopia

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Abstract

This study aims to identify the determinants for the growth of Small and medium enterprises (SMEs) in Derash Woreda, Gidole Town. To achieve the "general and specific objectives", this study was investigated external and internal factors affecting the growth of SMEs. This study was used a descriptive research design and a quantitative research approach. The primary data sources were collected from SMEs engaged in service, manufacturing, trade, construction, and urban agriculture. The sampling techniques used for this study are the stratified sampling technique. However, the sample size used for this study is 50 SMEs. For data analysis, multiple linear regression models were used. The finding for this study indicated that the external factors such as education, training, experience, and social network are positively or significant relationship with the growth of SMEs; on the other hand, the internal factors such as management capacity, marketing skill, accounting record-keeping, firm age and firm size are positively or significant relationship with the growth of SMEs. Hence, to increase the growth of SMEs, it is suggested that SMEs stockholders, SMEs owners, and government bodies improve the knowledge and awareness of SMEs related to external and internal factors. The concerned bodies to solve the problem provide access to finance, technology, skilled workforce, marketing and business communication and facilitating necessary infrastructure.

Keywords: Growth of Small and Medium Enterprises, Internal Factors, External Factors.

Introduction

Background of the Study

The SMEs sector everywhere is characterised by highly diversified activities that can create employment opportunities for a substantial population segment. This implies that the sector is a quick remedy for the unemployment and poverty problem. However, realising a modest standard of living through curbing unemployment and facilitating the environment for new job seekers and self-employment requires direct intervention and support of the government and other concerned stakeholders (Mulugeta, 2010).

Visser (2013) argued that SMEs form the backbone of emerging economies and are a vital source of income for most people in urban and rural communities.
The rapid growth of SMEs in any economy indicates positive progress for a nation especially indicated by profitability, market share, asset value, and even sales turnover. Furthermore, Hamel and Sapienza (2014) reveal that in current business conditions, where product and business model life cycles have a short lifespan, such qualities are emphatically positively connected with better development and growth of enterprises. According to Rose, Kumar, and Yen (2013), a small business is a business that is privately owned and operated, with a small number of employees and a low volume of sales.

Small businesses are typical in many countries, depending on the economic system in operation. Typical examples include convenience stores, bakery shops, hairdressers, merchants, lawyers, accountants, restaurants, photographers, etc. A standard definition provided by the Small and Medium Industries Development Corporation (SMIDEC) defines SMEs according to two main factors, annual sales turnover and the number of full-time workers (SMIDEC, 2014). SMEs mostly consolidate the businesses from the informal sector into the formalised economy, hence a driving force for economic growth and poverty reduction through job creation (Wolfenson, 2013).

The SMEs in each country have their characteristics based on the type of business and its environment that affect its growth. According to Asma Benzazoua, Diabate Ardjouman, and Othman Abada (2015) researched title with “Factors Affecting the Growth of SMEs in Algeria”; the finding reveals that the growth of SMEs in Algeria is hampered by several interrelated factors, which include business environmental factors that are beyond the SMEs’ control and internal factors of the SMEs. The external factors include the legal and regulatory framework, access to external financing, and human resources capacities. The internal factors comprise entrepreneurial characteristics, management capacities, marketing skills, and technological capacities.

Ahmad Rafiki (2019) conducted with the “Determinants of SMEs Growth: An Empirical Study in Saudi Arabia”; the finding shows that size of the firm, the experience of the manager, training, financing, and the network relationship has a significant relationship with the firm’s growth. However, other variables such as education and a firm’s age do not significantly affect the firm’s growth.

Demise G. Degefu (2018) researched title with “Factors That Determine the Growth of Micro and Small Enterprises: In the Case of Hawassa City, Ethiopia”; the finding shows that based on the regression analysis, capital change is significantly determined by explanatory variables like age of respondent, sex of respondent, government motivation, educational level, financial access, and adequate infrastructure which are factors for the growth of Micro and Small Enterprises (MSEs).

Amaridiwakara and Gunatilake (2017) conducted “Factors Affecting Growth of Small and Medium Enterprises in Sri Lanka”; the study revealed that the growth of SMEs is constrained by financial inadequacy, the lack of access to new technology, and regulations imposed by the government. Moreover, it was revealed that the level of education of the owner of the enterprise has a direct impact on the growth of SMEs.

Geleta and Talegeta (2019) conducted “Determinants of Micro and Small Enterprises Growth in Selected Towns of West Shoa Zone, Oromia Regional State, Ethiopia”; the result of the study revealed entrepreneurial competency, managerial skills, market access, innovation, high initial investment size, access to finance, and manufacturing sector variables were identified as a significant determinant of growth of the MSEs in the study area. On the other hand, MSEs owner/manager characteristics such as gender and age were found not to influence the growth of the enterprises as the descriptive result showed. The probability of growth of MSEs was positively influenced by entrepreneurship competency, management skill, market access, initial investment size, and sector in manufacturing; however, getting access to finance and engaging in innovation activity hurts the growth probability of MSEs based on the binary logit model result. The variables included in the model explain about 73.38% of the influences on the MSEs growth so that the model is fit.
Berhanu Tereda (2019) conducted “Determinants of Micro and Small Business Enterprises Growth: The Case of Three Selected Woreda, Gurage Zone, Ethiopia”; based on the findings, an unfulfillment of infrastructural facilities, shortage of working premises, and shortage of finances for start-up and expansion purposes are the topmost factors that affect the growth of MSEs activities at the study area. Furthermore, the findings indicate a positive, strong significant relationship between independent and dependent variables. Finally, the selected independent variables may significantly test the variations from the dependent variable at a 1% level of significance.

Solomon, Tadele, Shiferaw, and Behailu (2016) conducted “Determinants of Growth of Micro and Small Enterprises (MSEs): Empirical Evidence From Ethiopia”; the findings of the study reveal that MSEs suffer from a host of internal problems (e.g., weak human resources and other assets) and of external factors including lack of access to credit, limited market facilities, policy and regulatory bottlenecks. For small enterprises, access to credit appears to be a binding constraint for their growth as they are “too big” for microfinance institutions. However, they are “too small” for formal banks in terms of the loan size, reflecting the “missing middle financial intermediaries” that serve small enterprises.

Endi Sarwoko and Christeav Frisdiantara (2016) conducted “Growth Determinants of SMEs in Indonesia”; the results showed that individual factors directly affect the growth of the business, as well as an indirect effect through organisational factors. So the individual factors are a determinant of the growth of SMEs, due to individual factors which reflect the business experience and the motivation of the owners/managers will be able to manage the organisation to become more effective to compete. The effects are on the achievement of business growth. Environmental factors provide the most significant impact in achieving the growth of SMEs; it means the ability of owner/managers to produce competitive products, leverage technology, and diversity of products will determine the growth of SMEs.

Finally, there is very little literature on SMEs in Ethiopia, especially in Derash Woreda, Gidole Town. Therefore, this research intends to identify the internal and external factors that affect the growth of SMEs were engaging in services, manufacturing, construction, trade, and urban agricultural activities in Gidole Town. Therefore, this study seeks to fill the existing research gap by answering the research question:

• What are the external factors affecting the growth of SMEs?
• What are the internal factors affecting the growth of SMEs?

Research Objective
The general objective of this study is to identify factors affecting the growth of SMEs in Ethiopia: a case of Derash Woreda Gidole Town, Southern Region Ethiopia.

Based on the above general objective, the following specific objectives are drawn:

• To investigate the external factors affecting the growth of SMEs.
• To examine the internal factors affecting the growth of SMEs.

Research Hypothesis
In order to reply to the questions of the research, the following hypothesis was developed.

1. H0: There is no significant relationship between education and the growth of SMEs.
   H1: There is a positive and significant relationship between education and the growth of SMEs.

2. H0: There is no significant relationship between training and the growth of SMEs.
   H2: There is a positive and significant relationship between training and the growth of SMEs.

3. H0: There is no significant relationship between experience and growth of SMEs.
   H3: There is a positive and significant relationship between experience and growth of SMEs.

4. H0: There is no significant relationship between social networks and the growth of SMEs.
   H4: There is a positive and significant relationship between social networks and the growth of SMEs.

5. H0: There is no significant relationship between management capacity and the growth of SMEs.
   H5: There is a positive and significant relationship between management capacity and the growth of SMEs.
6. H0: There is no significant relationship between marketing skills and the growth of SMEs. H6: There is a positive and significant relationship between marketing skills and the growth of SMEs.

7. H0: There is no significant relationship between accounting record-keeping and the growth of SMEs. H7: There is a positive and significant relationship between accounting record-keeping and the growth of SMEs.

8. H0: There is no significant relationship between firm age and the growth of SMEs. H8: There is a positive and significant relationship between firm age and the growth of SMEs.

9. H0: There is no significant relationship between firm size and the growth of SMEs. H9: There is a positive and significant relationship between firm size and the growth of SMEs.

Literature Review

The Growth of the SMEs

SMEs’ growth is often closely associated with the firm’s overall success and survival. Growth is the most appropriate indicator for achieving other business financial goals. According to Phelps, Adams, and Bessant (2007) and Gilbert, McDougall, and Audretsch (2006), those indicated the growth has different implications that it is an increase in the amount such as growth in output, exports, and sales or an increase in size or a quality improvement. Growth, however, can be measured in different possible indicators such as market share, assets, profits, physical outputs, employment, firms’ resources and sales. The factors associated with SMEs’ growth are derived from the owner/manager and the firms’ strategy. There are predicted variables of the firm’s growth that were adopted by authors that include: motivation, education, experience, firm age and size, location, ownership, technology, marketing activities and policy, human resource, economic conditions, competition, strategic and financial management, infrastructure and external relationships.

Empirical Evidence on the Determinants of the Growth of SMEs

According to Asma Benzazoua et al. (2015), who researched title with “Factors Affecting the Growth of SMEs in Algeria”, the finding reveals that the growth of SMEs in Algeria is hampered by several interrelated factors, which include business environmental factors that are beyond the SMEs’ control and internal factors of the SMEs. The external factors include the legal and regulatory framework, access to external financing, and human resources capacities. The internal factors comprise entrepreneurial characteristics, management capacities, marketing skills, and technological capacities.

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Empirical studies on factors affecting the growth of SMEs can be roughly divided into two factors: internal factors and external factors affecting the growth of SMEs.

External factors. Researchers have used external factors affecting the growth of SMEs. Some of them have considered environmental and external factors to have a significant impact on the performance and growth of small firms (Benzazoua et al., 2015). We can summarise the external factors affecting the growth of SMEs as follows:

**Education.** Souitaris, Zerbinati, and Al-Lahan (2007), Hall and Wahab (2007), Ucbasaran, Westhead, and Wright (2008) indicated that human resources capacities have the most positive and significant factors for the development of small firms, which increase employee skills and motivation, and eventually result in improving the productivity and long term sustainability of small firms. According to firms with a skilled and well-educated workforce, they are probably learning and innovative abilities. However, low human resource capabilities are a significant challenge for the development of SMEs in developing countries. Therefore, education is the most vital of all resources. It is widely recognised that formal education positively impacts entrepreneurs’ decisions to increase business growth opportunities. Owner managers who possess education may cope
with problems and consequently be more successful or foster business growth. This has been shown that years of schooling or university studies have impacted business growth. In addition, education provides knowledge that may help overcome financial constraints.

Moreover, the firms’ owners/managers with better education levels are more efficient and will build their character and enhance their skills. Formal education may provide entrepreneurs with a greater capacity to learn individual capabilities to process new information, new production and product designs, specific technical knowledge related to firm expansion and increase owners’ flexibility. Additionally, more educated entrepreneurs have the necessary dedication, discipline, motivation, and self-confidence to attain higher growth rates in their businesses.

Training. Kessy and Temu (2010) indicated that training is considered as a sub-division of education; when managers undergo training, the business could potentially have more significant assets and sales revenue whereby in the training sessions, the managers add specific or new skills and become more efficient in those skills, which they already have.

Singh and Belwal (2008) and Roomi, Harrison, and Beaumont-Kerridge (2009) revealed that training has positive impacts of training such as the capability of completing challenging tasks, having control over one’s own job, moving upwards in terms of the enterprise activities; creating more opportunities for enterprises, acquiring knowledge on better management techniques; and developing business network commercial activities. However, the lack of training was a significant factor impeding the growth of SMEs in developing countries.

Singh and Belwal (2008), Shariff and Peaou (2008), and Taiwo, Ayodeji, and Yusuf (2012) indicated that most training is formal. However, the training differs slightly from education in terms of the duration and specialised skills acquisition. Training is also related to the motivational factors of employees for growth, encouragement, and it can change their behaviours in their working places which may affect the earnings and productivity of firms. Any business process will only succeed if employees are adequately equipped with skills and motivation.

Experience. Syed (2011) shows that experience is another relevant dimension of human capital that may impact a firm’s growth. Work experience gives entrepreneurs specific knowledge and managerial capabilities, which can help develop more successful strategies leading to higher growth rates. In addition, the experience is the best teacher in learning processes; thus, with sufficient previous experiences, entrepreneurs would not repeat any mistakes they had committed before. Moreover, the main reason behind the business failure is the absence of experience, especially in the managerial aspect.

Other studies by Raduan, Kumar, and Lim (2006) and Muhammad (2012) found that work experience has a positive relationship between managers’ business experience and a firm’s growth. These indicate that the experience is needed in driving business into a success. Some authors disagreed and stated that the previous labour market experience negatively correlates to firms’ growth. However, the managerial experience is more comprehensive and complex than labour market experience, and many authors agreed with its positive relationship.

Social network relationships. Nichter and Goldmark (2009) defined social capital as friends, colleagues, and more general contacts through which you receive an opportunity to use your financial and human capital. The social capital concept is based on the principle that “Goodwill that others have toward us is a valuable resource”. Social capital leads to positive effects to any firms such as building trust, increasing efficiency in actions and supporting cooperative behaviour, carrying a set of valuable resources such as norms, shared values and destiny, favourable reputation, and generating structural effects such as wide-ranging networks. Moreover, it confers some forms of advantage to a firm through social interactions on trade opportunities and some degrees of protection against the risks associated with foreignness, newness, and smallness. Extant literature on small firm social capital and firm growth revealed some evidence of positive statistical association. Small firms that have established suitable contacts and can develop unique relationships create a competitive advantage in their marketplace.
Kontinen and Ojala (2010) stated that networks are a vital element of social capital and affirm the strong relationship between social capital building and successful economic development. Networks are often a proxy for resource access. Strong networks have been identified as one of the fundamental concepts in the entrepreneurship discipline, and the nature and sources of networks used have been associated with small firm growth. Sequeira, Mueller, and McGee (2007) posited that networks carry a motivation factor for the entrepreneurs at the early stages with various relationships. This motivation facilitates long-term relationships with the increasing likelihood of further interactions such as increased frequency of contacts, raised awareness and growth in tacit knowledge/information exchange where each party develops some informal control over the others. According to Ekanem and Smallbone (2007), numerous pieces of evidence found network relationships’ contributions to the success of the owner-managers; commonly used diversified networks from stakeholders such as universities, suppliers, customers, business services, business support institutions, and venture capitalists to facilitate their learning on market and business operations. When the firm is a member of an active network, the owner/managers could receive critical knowledge on new market characteristics, thereby reducing the transaction costs than getting knowledge through independent sources or consultants.

Internal factors were affecting SMEs growth. The success and failure of SMEs are not only related to external factors but also depends on the firm internal factors affecting the growth of SMEs, which can be determined as follows:

**Management capacity.** According to Olawale and Garwe (2010), management capacities are sets of knowledge, skills, and competencies that make the small firm more efficient. Singh and Belwal (2008) emphasise that management skills are necessary for SMEs to survive and achieve growth. Aylin, Garango, Cocca, and Bititchi (2013) state that management skills are a crucial factor for the growth of SMEs and that the lack of management skills is a barrier to growth and is one of the factors that can lead to failure. Pasanen (2007) suggests that the growth pattern of small firms is associated with their managerial capacities. A shortage of core competence and a skilled top management team is SMEs’ main challenges.

**Marketing skills.** Marketing skills have been considered one of the most influential factors for firm survival and growth. According to Van Scheers (2011), the lack of marketing skills hurts the success of small businesses. Pandya (2012) noted that the marketing limitations of SMEs resemble other limited resources such as financial and human resources.

**Accounting record keeping.** According to Ferreira et al. (2011), Abdul-Rahamon et al.(2014), and Nyathi and Benedict (2017), concluded that the main problem of the business owner and managers of micro-enterprises to have an adequate record of business transactions; inadequate financial control and lack of correct accounting, neglect on the financial planning, control, analysis and appraisal that led to the high failure rate of their businesses, the risk of hitting cash flow crisis, wasting money, and losing opportunities to expand their businesses, inadequate accounting records, their inability to keep sufficient records, do not maintain proper books of accounts because owners do not appreciate the need to keep accounting records, lack accounting knowledge, and find the cost of hiring professionals too expensive. This is because most SMEs operators do not know how to maintain such records simply and easily. As a result, many operators find it difficult to give information on their income and expenditure and ultimately do not know whether they have lost or profited from their business activities. Indeed, according to Onaolapo and Adegbite (2014), the variation in Small and Medium Enterprises (SMEs) can largely be explained by the level of accounting record keeping.

Regionally, studies indicate that record keeping has been embraced as a driving factor for most African countries’ financial performance. Financial record-keeping has become the foundation for modern businesses’ growth and sustainability. According to Ademola et al.(2012), businesses are highly dependent on financial records kept in the books of accounts indicating different transactions such as sales, purchases, income, and payments by an individual or organisation. According to
Dawuda and Azeko (2015), good financial records can significantly improve many management decisions a business owner and or manager takes, including marketing, personnel, borrowing, pricing, inventory, and product development. According to Bowen, et al (2009), it is widely believed that record-keeping has a significant impact on the financial performance of a given business. For instance, Onaolapo (2014) asserts that record-keeping gives factual information about an enterprise’s financial strength and current performance, and therefore managers find those records useful in making decisions. In addition, Bowen, et al (2009) emphasises that good record keeping will make any business partner or investor more aware of what is going on in their businesses and save them money.

Age of the firm. According to Psillaki and Daskalakis (2009), Abor and Biekpe (2009), Benkraiem and Gurau (2013), Abdulsaleh and Worthington (2013), and Kumar and Rao (2015), this regarding the relationship of the firm’s age and growth has been persistent in most of the research. The younger firms have more difficulties acquiring external finances due to the lack of an established track record, less creditworthiness, and knowledge acquisition to succeed. Thus, younger SMEs rely more on internal sources of funding. Compared to younger SMEs established under five years, older SMEs are much more successful in their credit applications. The obstacle of financing due to age has inhibited SMEs from growing. The old small firms are likely to fail, while young small firms have the highest growth rates. Among the reasons is that the small, older firms cannot adapt to the environmental changes compared to younger firms. This was consistent with the findings that the younger firms experienced significantly higher short-term growth rates than older firms (Carr, Haggard, Hmieleski, & Zahra, 2010).

Firm size. Abdulsaleh and Worthington (2013) found that firm size is the most widely studied and significant factor in SME growth. There is almost an agreement that size is associated with SMEs growth. However, there is no agreement regarding the relationship between firm size and growth. Federico et al. (2012), Almeida and Campello (2007), and Rafiki and Abdul-Wahab (2013) mentioned that differences in a firm size would reflect different positions along the critical growth path, and the more prominent firm may enjoy the advantages of having more considerable resources that may give the optimum combination for optimum production. Based on the RBV perspective, the larger firms must have more internal resources and better access to external resources. Thus a firm’s size has a positive relationship with growth. On the other hand, there is a positive relationship between the firm’s size and the firms’ growth. However, small firms grow more rapidly than larger ones; both are negatively related.

Conceptual Framework

This study aims to identify factors affecting the growth of SMEs in DerashWoreda, Gidole Town. Based on the literature review and the current research undertaken in the area, the study developed the conceptual model related to external factors, which includes the “education, training, experience and social network” and related with the internal factors affecting the growth of SMEs such as “marketing skill, management capacity, accounting record-keeping, firm age, and size”. This conceptual model is used while conducting the research analysis.

Research Methodology

A descriptive research design and a quantitative research approach were used to achieve the study’s objective. The study’s target population was 58 Small and Medium Enterprises in Gidole Town. The SMEs were licensed and operated under the legal framework of doing business in Ethiopia. The sampling technique adopted for this study is stratified sampling techniques because the sample was selected from different stratum operating at SMEs’ manufacturing, service, trade, construction, and urban agriculture level. The sample size used for
this study was 50 SMEs. To determine sample size Yamane (1967) simplified formula was used:
\[
n = \frac{N}{1+N(e)^2}
\]
where “n” is the sample size, “N” is the population size, and “e” is the level of precision,
\[
\frac{58}{1 + 58(0.05)^2} = 50.
\]

Table 1: Sample Size Distribution of SMEs

<table>
<thead>
<tr>
<th>Categories of Sectors</th>
<th>Total Population</th>
<th>Population ratio</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service</td>
<td>15</td>
<td>50 (15/58)</td>
<td>13</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>21</td>
<td>50 (21/58)</td>
<td>18</td>
</tr>
<tr>
<td>Trade</td>
<td>15</td>
<td>50 (15/58)</td>
<td>13</td>
</tr>
<tr>
<td>Construction</td>
<td>2</td>
<td>50 (2/58)</td>
<td>2</td>
</tr>
<tr>
<td>Urban agriculture</td>
<td>5</td>
<td>50 (5/58)</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>50(58/58)</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: Secondary Data 2020

Method of Data Analysis

In this study the multiple linear regression models were used for data analysis. The regression model was:
\[
GSME = \beta_0 + \beta_1 EDU + \beta_2 TR + \beta_3 EX + \beta_4 SNW + \beta_5 MC + \beta_6 MS + \beta_7 ARK + \beta_8 FA + \beta_9 FS + \epsilon
\]
where,
GSME= Growth of SME, EDU= Education, TR= Training, EX= Experience, SNW= Social Network, MC = Management Capacity, MS = Marketing Skill, ARK = Accounting Record Keeping, FA = Firm Age, FS = Firm Size, and \(\epsilon\) = Error Term.

Regression Analysis
Correlation Analysis Between Independent and Dependent Variable

Correlation Matrix for the Growth of SMEs (GSME), Education (ED), Training (TR), Experience (EX), Social Network (SNW), Management Capacity (MC), Marketing Skill (MS), Accounting Record Keeping (ARK), Firm Age (FA), Firm Size (FS).

Table 2: Correlation Matrix for SACCO Financial Performance

<table>
<thead>
<tr>
<th></th>
<th>GSME</th>
<th>ED</th>
<th>TR</th>
<th>EX</th>
<th>SNW</th>
<th>MC</th>
<th>MS</th>
<th>ARK</th>
<th>FA</th>
<th>FS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSME</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ED</td>
<td>0.859**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR</td>
<td>0.823**</td>
<td>0.726***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EX</td>
<td>0.544**</td>
<td>0.370**</td>
<td>0.559**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SNW</td>
<td>0.647**</td>
<td>0.698**</td>
<td>0.514**</td>
<td>0.509**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC</td>
<td>0.868**</td>
<td>0.849**</td>
<td>0.730**</td>
<td>0.495**</td>
<td>0.856**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MS</td>
<td>0.679**</td>
<td>0.398**</td>
<td>0.385**</td>
<td>0.461**</td>
<td>0.521**</td>
<td>0.602**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARK</td>
<td>0.572**</td>
<td>0.591**</td>
<td>0.436**</td>
<td>0.378**</td>
<td>0.459**</td>
<td>0.394**</td>
<td>0.506**</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FA</td>
<td>0.635**</td>
<td>0.497**</td>
<td>0.563**</td>
<td>0.608**</td>
<td>0.403**</td>
<td>0.357**</td>
<td>0.386**</td>
<td>0.541**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>FS</td>
<td>0.594**</td>
<td>0.374**</td>
<td>0.402**</td>
<td>0.523**</td>
<td>0.411**</td>
<td>0.393**</td>
<td>0.507**</td>
<td>0.437**</td>
<td>0.546**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Note. **Correlation is significant at the 0.01 level (2-tailed), *N= sample size of 50.
Source: SPSS result of the own survey 2020.

Correlation analysis of external factors and growth of SMEs. According to Table 2 above, Pearson Correlation external factors are such as education (0.859), training (0.823), experience (0.544), and social network (0.647). It suggested a positive and significant relationship between education, training, experience, social network, and growth of SMEs. The correlation coefficient is 0.000, statistically at 1% of the significant level. The finding stated that the external factors due to lack of education, training, experience, and poor social network significantly affect the growth of SMEs. Thus, the null hypothesis (H0) can be rejected, and alternative hypotheses (H1, H2, H3, and H4) have to be accepted due to the significant relationship with the growth of SMEs.
Correlation analysis of internal factors and growth of SMEs. The Pearson Correlation internal factors are such as management capacity (0.868), marketing skill (0.679), accounting record keeping (0.572), firm age (0.635), and firm size (0.594). It suggested a positive and significant relationship between management capacity, marketing skill, accounting record-keeping, firm age, and firm size with the growth of SMEs. The correlation coefficient is 0.000, statistically at 1% of the significant level. Therefore, the finding stated that the internal factors due to poor management capacity, lack of marketing skill, poor accounting record-keeping, firm age, and size significantly affect the growth of SMEs. Thus, the null hypothesis (H0) can be rejected, and alternative hypotheses (H5, H6, H7, H8, and H9) have to be accepted because the variables are a significant relationship with the growth of SMEs.

Regression Model Summary

Table 3: Multiple Regressions of Independent Variables and Dependent Variable (GSME)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R square</th>
<th>Adjusted R square</th>
<th>Std. error of the estimate</th>
<th>Change statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0.938a</td>
<td>0.880</td>
<td>0.877</td>
<td>0.14180</td>
<td>0.880</td>
<td>313.118</td>
</tr>
</tbody>
</table>

Notes.Predictors: (Constant), ED, TR, EX, SNW, MC, MS, ARK, FA, FS; Dependent Variable: GSME. Source: SPSS result of the own survey 2020.

In Table 3, the coefficient of correlation (R) of the variables as a whole, the fitness of the model (R2), adjusted R Square(adj.R2), and standard error of the estimate was computed using SPSS 20.0 software. In the column labelled R (correlation coefficient), there were the values of the multiple correlation coefficients between the predictor and the outcome. When the nine predictor variables were used at once, the correlation between the independent and dependent variables will be 0.938. The correlation coefficient lies with a value between -1(perfect negative correlation) to +1(perfect positive correlation); this shows a strong correlation between the dependent and the independent variables.

The next column gives us a value of R2(Coefficient of determination) or fitness of the model, which measures how much the variability in the outcome was accounted for by the predictors or the percentage of the dependent variable explained by the independent variables. Therefore, the value was 0.880, which means that ED, TR, EX, SNW, MC, MS, ARK, FA, and FS are for 88% of the variance in the growth of SMEs.

The Durbin Watson test statistics was 1.842, as shown in Table 3; this indicates that all alternative hypotheses are accepted; there was a positive correlation as the value was smaller than 2. Field (2009) generally shows a positive correlation as the value was less than 2.

Analysis of Variance

Table 4: Significant of Independent Variables on Dependent Variable (Growth of SME)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>31.479</td>
<td>5</td>
<td>6.296</td>
<td>313.118</td>
<td>0.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>4.303</td>
<td>44</td>
<td>0.020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>35.782</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Based on Table 4, by looking at the F-statistics and corresponding probability (P) value, it can be used as a proxy for checking overall model significance. In this model, F-value is 313.118, and the corresponding probability value is 0.000, which is less than a 5% level of significance as indicated by
sign <0.000. Therefore, the study models significantly more variance for the growth of SMEs. The study has established ED, TR, EX, SNW, MC, MS, ADK, FA, and FS, which influence SMEs’ growth. The significance of the study means that the regression model was also significant and therefore fit for the study.

### Model Parameters for the Growth of SMEs

The result of multiple regression analysis on the relationship between ED, TR, EX, SNW, MC, MS, ARK, FA, FS, and the growth of SMEs in Derash Woreda, Gidole Town.

#### Table 5: T-Test and Beta Coefficients of the Independent Variables

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients</th>
<th>T</th>
<th>Sig.</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstandardized coefficients</td>
<td>Standardized coefficients</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.628</td>
<td>0.048</td>
<td>7.142</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>ED</td>
<td>0.228</td>
<td>0.030</td>
<td>0.365</td>
<td>7.552</td>
<td>0.000</td>
</tr>
<tr>
<td>TR</td>
<td>0.392</td>
<td>0.021</td>
<td>0.484</td>
<td>6.275</td>
<td>0.000</td>
</tr>
<tr>
<td>EX</td>
<td>0.209</td>
<td>0.024</td>
<td>0.362</td>
<td>5.132</td>
<td>0.000</td>
</tr>
<tr>
<td>SNW</td>
<td>0.361</td>
<td>0.028</td>
<td>0.497</td>
<td>7.807</td>
<td>0.000</td>
</tr>
<tr>
<td>MC</td>
<td>0.282</td>
<td>0.032</td>
<td>0.599</td>
<td>6.702</td>
<td>0.000</td>
</tr>
<tr>
<td>MS</td>
<td>0.241</td>
<td>0.041</td>
<td>0.416</td>
<td>5.501</td>
<td>0.000</td>
</tr>
<tr>
<td>ARK</td>
<td>0.387</td>
<td>0.022</td>
<td>0.494</td>
<td>6.714</td>
<td>0.000</td>
</tr>
<tr>
<td>FA</td>
<td>0.261</td>
<td>0.031</td>
<td>0.214</td>
<td>5.984</td>
<td>0.000</td>
</tr>
<tr>
<td>FS</td>
<td>0.206</td>
<td>0.035</td>
<td>0.441</td>
<td>7.003</td>
<td>0.000</td>
</tr>
</tbody>
</table>


### Model summary

The regression model was as follows:

\[
\text{GSME} = 0.628 + 0.228\text{ED} + 0.392\text{TR} + 0.209\text{EX} + 0.361\text{SNW} + 0.282\text{MC} + 0.241\text{MS} + 0.387\text{ARK} + 0.261\text{FA} + 0.206\text{FS} + 0.048.
\]

According to Table 5 above, the coefficient test for the variables involved is presented. The table depicts how each independent variable influences the dependent variable. The standardised Beta coefficient explains the factors affecting the independent variables in contributing to the variance of the growth of SMEs (dependent variable). The Beta value for education is (Beta= 0.365, P<0.05), training (Beta= 0.484, P<0.01), experience (Beta= 0.362, P<0.01), social network (Beta= 0.497, P<0.05), management capacity (Beta= 0.599, P<0.01), marketing skill (Beta= 0.416, P<0.01), accounting record-keeping (Beta= 0.494, P<0.01), firm age (Beta= 0.214, P<0.05), and firm size (Beta= 0.441, P<0.05). The result reveals a significant relationship between independent variables (education, training, experience, social network, management capacity, marketing skill, accounting record-keeping, firm age, and firm size) and the dependent variable (growth of SMEs).

### Hypothesis Testing and Interpretation of the Results

This section of the study aims to determine the factors affecting SMEs’ growth in DerashWoreda, Gidole Town. This particular section presents the results of the study indicated by statistics, using regression analysis, and the effect of each independent variable test is discussed and analysed. The results show significant relationships between independent variables (such as education, training, experience, social network, management capacity, marketing skill, accounting record-keeping, firm age, and firm size) and dependent variables (growth of SMEs). Even though most of the hypotheses are supported, the study found a strong relationship between the independent variables and the growth of SMEs. The hypotheses testing based on regression model output is discussed below.

**Hypothesis.** The regression result shows a significant positive relationship between education, training, experience, social network, management capacity, marketing skill, accounting record-keeping, firm age, and firm size and the growth of SMEs: standardized Beta coefficient of ED (Beta= 0.365,
t-statistic of 7.556), TR (Beta = 0.484, t-statistic of 6.275), EX (Beta = 0.362, t-statistic of 5.132), SNW (Beta = 0.497, t-statistic of 7.807), MC (Beta = 0.599, t-statistic of 6.702), MS (Beta = 0.416, t-statistic of 5.501), ARK (Beta = 0.494, t-statistic of 6.714), FA (Beta = 0.214, t-statistic of 5.984), and FS (Beta = 0.441, t-statistic of 7.003) and P-value of 0.000. When the percentages of Beta coefficient value will increase, one unit increases in the independent variable, the growth of SMEs. Thus, the regression results show that all independent variables are statistically significant at 1% because the P-value was 0.000, less than 1%. Therefore, the alternative hypotheses (H1, H2, H3, H4, H5, H6, H7, H8, and H9).

The implication of this finding is lack of education, lack of well trained and experienced workforce, lack of social communication and business network, poor management capacity due to “lack of a strategic business plan, inefficient utilisation of financial resource and poor management decision” lack of marketing skills due to “weak marketing research, inadequate market segmentation, lack of assessing potential customers”, poor accounting record keeping due to “lack accounting knowledge, lack of correct accounting record, inability to keep sufficient business transactions, bad financial planning, control and analysis, inadequate books keeping”, firm age and size due to “unable to adapt to the environmental changes and lack of access to land, external financing, inefficient for reinforcing the competitiveness” which have a strong influence on the growth of SMEs in DerashWoreda, Gidole Town. The finding of this study was consistent with the conclusions forwarded by Singh and Belwal (2008), Roomi et al.(2009), Ferreira et al. (2011), Federico et al. (2012), Abdulsaleh and Worthington (2013), Rafiki and Abdul-Wahab (2013), Abdul-Rahamon et al. (2014), Benzazoua et al. (2015), Nyathi and Benedict (2017), and Rafiki (2019) who indicted that education, training, experience, social network, management capacity, marketing skill, accounting record-keeping, firm age, and firm size are positive and significant factors for the growth and development of SMEs in developing countries. On the other hand, the current study contradicted the conclusions forwarded by Ahmad Rafiki (2019); the finding shows that education and firm size do not have a significant relationship with the firm’s growth in Saudi Arabiya. Although Almeida and Campello (2007) argued that small firms grow more rapidly than larger ones, both are negatively related.

Conclusion and Recommendations

Based on the above findings and conclusions of the research, this study has recommended specific points that the researcher thought to be critical if accordingly and appropriately considered and implemented by the responsible SMEs stakeholders, owners of SMEs, government bodies, and future researchers. Accordingly, based on the study findings, the following recommendations were forwarded.

SMEs Stakeholders

This study has implications for the SMEs’ stakeholders. Through this study, the stakeholders should get the contacts and understandings of how the firms grow. They can learn theoretically and practically the important things to be adopted to achieve growth. They should gain more experience to guide better and supervise subordinates, and they need to attend work or business-related training to upgrade and enhance their competitive skills. For instance, the stakeholders should assess the external access to finance, market segment and facilitate business communication using social networks among internal and external bodies.

SMEs Owners or Managers

This study recommended that the owner of SMEs should be upgraded management capacities by sets of knowledge, skills, and competencies that can make the SMEs more efficient. In addition to this, they should pay attention to improving their enterprises’ recordkeeping and accounting systems.

For Government Bodies

According to this study result, SMEs are weak regarding the overall activity. Even though the Ethiopian government tried to solve external factors by providing chances to access finance, technology, marketing areas, and necessary infrastructure as much as possible, most SMEs failed to upgrade themselves to be large companies. This implies
that governments and other potential donors are overlooked in preparing and giving SMEs sufficient training to manage their financial resources efficiently and effectively and prepare a financial report. Therefore, the researcher recommends that government should facilitate training access to Small and Medium Enterprises to improve their ability, knowledge, and awareness in financial resource utilisation, marketing, financial record keeping, and human resources capacity to develop the growth of SMEs.

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Conflict of Interest

The authors have commonly agreed that they have no conflict of interest among this research publication.

Technical Terms

The following are the technical terms used by Ethiopians

- Woreda called as District
- Kebele called as Village
- Kolla means Lowland
- Woye-Dega means Mid-land
- Dega means Highland

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