



Determining high quality SMEs that significantly contribute to SME growth: regional evidence from South Africa

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Аннотация

It has been widely advocated that SMEs create most of the jobs in an economy. However, studies from both the developed and developing world have shown that only a small amount of SMEs create most of the jobs in an economy. These set of SMEs have been termed high quality firms that grow and create the much needed jobs. While studies from the developed world have identified a number of factors that depict the quality of a firm, there is however, little empirical evidence from the developing world on firm quality. This study has as main objective to determine the factors of firm quality that can be used to define a high quality SME in South Africa that contributes significantly to SME growth. The results showed that human capital, growth ambition, innovativeness, motivation, and market orientation could be used to define a high quality SME in South Africa that contributes significantly to SME growth (employment growth, sales growth and asset growth). Furthermore, SME quality as defined in this study significantly affects the growth of an SME. These findings are timely, as the South African government currently has a keen interest on using the SME sector to address the high unemployment rate in the country. This study recommends that this can be achieved by developing policies that promote the creation of high quality start-ups and not simply increasing the number of start-ups as prior policies have done

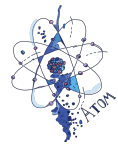
Ключевые слова: South Africa, job creation, SME quality, firm growth



Introduction

Small and medium enterprises (SMEs) all around the world have been recognized as the key engine to economic development as they create almost half of the new jobs in the world's economy (Edmiston, 2007). Kongolo (2010) remarks that SMEs play a significant role in contributing to the economic progress of many countries around the world. Data from both the developed and developing countries has revealed that the SME sector is an active and vibrant force for economic growth, innovation and job creation (Chodokufa, 2009; Andzelic, Dzakovic, Lalic, Zmic and Palcic, 2011). Specifically, in developing countries, SMEs are not only important because they create jobs but also because they create employment for the unskilled workforce who happens to be overly abundant (Phillips and Bhatia-Panthaki, 2007). Kongolo (2010) explicates that SMEs in South Africa represent about 91% of the formal businesses, provide almost 60% of employment and contribute about 51% to 57% of GDP. A study by World Wide Worx in 2012 observed that SMEs in South Africa create around 7.8 million jobs and play a vital role in reducing wealth inequalities and improving the economic growth. The South African government recognizes the role the SME sector plays in fostering economic growth and development by creating a host of government initiatives to address the financing needs of SMEs; ease the creation of new SMEs; foster and increase entrepreneurship activity in the country; help in alleviating poverty; generate wealth for previously disadvantaged people; and create profitable opportunities for indigenous entrepreneurs (Fatoki, 2010; Neneh and Smit, 2013).

However, despite the significant contribution of established SMEs and the expected contribution of new SMEs, the creation rate of successful SMEs in South Africa is one of the lowest in the world, as most new SMEs in the country do not move from the first stage (existence) of growth to other stages such as survival, success, take off and resource maturity (Fatoki and Garwe, 2010). Willemse (2010) established that the number of SME failures in year 5 varies between 50% and 95% and about 75% of new SMEs do not become established firms. The Reserve Bank governor Gill Marcus in his speech at the 26th annual Labor Law Conference stated that SMEs in South Africa have not seen growth as one would expect from a developing country and thus, do not provide their full benefits to society. Although SME growth is a major source of new jobs, prior



studies (Wiklund, Davidsson & Delmar, 2003; Gundry and Welsch, 2001) have indicated that most SMEs do not grow because SME owner managers are either not interested in growth or deliberately refrain from pursuing growth. Wong, Ho and Autio (2005) and Karadeniz and Ozcam (2010) observed that growth oriented SMEs contribute more to the economic growth than do non-growth oriented SMEs in general.

With South Africa having one of the highest unemployment rates with an official estimate of approximately 25.2% (Statistics South Africa, 2014) creating jobs is central to economic growth and political stability in the country. Maas and Herrington (2007) elucidate that SMEs are expected to be an important vehicle to address the challenges of job creation and sustainable economic growth in South Africa. According to Fritsch (2011), the creators of new SMEs should focus more on enhancing the number of high quality firms and not just increasing the number of start-ups. Fritsch and Schroeter (2011) explicate that the quality of a start-up plays a vital role in the subsequent growth of the firm and its contribution to economic development. However, it is uncertain how to define the exact quality of firms that contribute to SME growth and economic development as various researchers (Piergiovanni and Santarelli, 2006; Shane, 2009; Fritsch and Schroeter, 2009) use different dimensions of firm quality in different settings and geographical locations. Notwithstanding, all these dimensions aim at helping entrepreneurship policy makers to answer the important question of whether to encourage new firm creation, foster the survival of existing firms, or place more emphasis on potentially growing firms. The potentially growing firms are the high quality firms that play a vital role in job creation. There are strong academic convictions that policies which ignore the aspect of fostering high quality firms and focus merely on increasing the number of start-ups yield only a slightly positive or even a negative marginal effect on economic growth and development (Fritsch, and Schroeter, 2009; Fritsch, 2011). Based on these convictions, this study has as objective to determine which factors of firm quality can be used to define a high quality SME in South Africa that contributes significantly to SME growth. Furthermore, the study will appraise the causal relationship between high quality SMEs (defined based on the established factors) and SMEs growth.



1. SMEs growth

SME growth has been identified as a key driver to economic development and the creation of wealth and employment in every country around the world (Davidsson et al., 2010; Nixon, 2000). According to Schwass (2005), SME growth is important because it is an outward indication that the business is successfully responding and adapting to the needs of the market. Prior studies (Davidsson et al., 2007; Dobbs and Hamilton, 2007) have established that SME growth should be encouraged because it creates employment opportunities in society and can act as a cure for the economic down-turn. Hence, it becomes vital to promote the creation of growth oriented SMEs since they contribute to the economy through employment creation, generating higher production volumes, and introducing innovation and entrepreneurship skills.

Prior studies have measured SME growth using three key dimensions namely: employment growth, sales growth and asset growth (Shepherd and Wiklund, 2009; Isaga, 2012; Sirec and Mocnik, 2010). Fatoki (2013) highlighted that employee growth is an important measure of firm growth in South Africa because of the country's current eagerness for job creation. However, other studies (Isaga, 2012; Achtenhagen, Naldi & Melin, 2010) in other parts of the world have argued that sales growth is the most essential and widely used measure of SME growth. Researchers (Shepherd and Wiklund, 2009; Levie & Autio, 2013) have also emphasized the importance of using asset growth as a key measure of firm growth.

In evaluating firm growth, recent studies (Coad, Segarra & Teruel, 2013; Haltiwanger, farmin & Miranda, 2013; Lawless, 2014) have highlighted the vital role that firm age plays in firm growth. Haltiwanger et al. (2013) showed that it is important to control for firm age when determine the impact of independent factors on firm growth. This is because while firms generally improve their growth over time; the net effect of their growth might vary significantly based on the firm's age (Coad et al., 2013). For example, while older firms might be larger in size, younger firms might have a higher net effect on employment growth than older firms (Haltiwanger, 2013; Lawless, 2014). Coad et al. (2013) also showed that while older firms were better at converting sales growth into subsequent growth (e.g. profits, employment, assets), they, however, have lower than expected growth rates as growth in sales seem to deteriorate with age. Based on these arguments, this study upholds that to ascertain



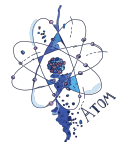
the impact of SME quality on firm growth, it is imperative to control for the effect of firm age.

2. Factors that contribute to the quality of SMEs

Defining the quality of a new business can be expressed in various different dimensions. Several researchers (Fritsch and Schroeter, 2009 & 2011; Piergiovanni and Santarelli, 2006; Shane, 2009) have established some of these dimensions to include: the entrepreneurial skills of the founder; the innovativeness of the start-up; the available human capital of the SMEs; innovativeness of the supplied goods and services; the qualification of the entrepreneur; the motivations of the entrepreneur (opportunity vs. necessity start-ups) and his/her growth ambitions; the marketing strategy pursued by the start-up; and the productivity and the survival of the start-up over a certain period of time. A high quality SME has a greater positive impact on economic growth and development than a low quality SME. This is because high quality firms create comparatively more jobs than other firms (Fritsch and Schroeter, 2011) and thus have a relatively higher effect on fostering SME growth. However, all across the world, SME survival and growth rate is low, which goes to show that the numbers of anticipated high quality SMEs are very small. Researchers (Shepherd and Wiklund, 2009; Andzelic et al., 2011) also stress that the growth of SMEs is of special importance not only for the role they play in wealth and job generation possibilities, but also for their ability to foster innovation.

This study will focus on five factors of SME quality (the available human capital of the SME; the motivations of the entrepreneur (Opportunity vs. Necessity); growth ambition of the entrepreneur; market orientation; and the innovativeness of the SME) in an attempt to establish which of them can account for the high quality of SMEs that contribute significantly to SME growth.

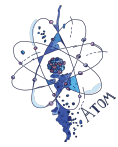
2.1. The available human capital of the SMEs. Human capital refers to the knowledge that is embodied in individuals, including skills developed through learning by doing and training, inherited abilities, and qualifications obtained through education. According to Fatoki (2011), the concept of human capital implies an investment in people through education and training. Human capital can be divided into general and specific human capital. Carrera, Gutierrez and Carmona (2003) define general human capital as the acquisition



of an inclusive formal education and training that is relatively transferable across firms and industries. Specific human capital on the other hand refers to skills pertaining to a specific job (or position) that have no effect on the productivity of employees working in other firms (not transferable to other occupations). The human capital of an entrepreneur is usually measured using two key dimensions namely: the level of education and industry experience (Fatoki, 2011; Segal, Borgia and Schoendfeld, 2009).

Human capital is an important aspect of firm quality as it is seen to significantly enhance the performance, competitiveness, success, and growth of businesses (Segal et al., 2009; Lafuente and Rabetino, 2011; Colombo and Grili, 2005). In SMEs, the focus is always on the human capital of the founder/ owner manger which is mostly measures in terms of education and prior work experience (Fatoki, 2011; Segal et al., 2009). A study by Herrington et al. (2009) revealed the lack of education and training as the most important cause of failure for new SMEs in South Africa. In the dimension of industry experience, a couple of studies (Batjargal, 2005; Colombo and Grili, 2005) have established that industry experience has a significant positive impact on firm growth. Haynes (2003) observed that new businesses started by entrepreneurs with prior industry experience produced nearly 80% greater sales revenues than their counterpart ventures.

2.2. The motivations of the entrepreneur (Opportunity vs. necessity). The concept of opportunity and necessity entrepreneurship was introduced by the Global entrepreneurship Monitor (GEM) in 2001 and since then, a good number of GEM reports (Block and Wagner, 2007; Reynolds et al., 2002) have widely discussed the concept. The distinction between opportunity and necessity based entrepreneurship can be best understood from the entrepreneurs' motivation to start a business. Opportunity entrepreneurs are those who start their businesses in order to pursue an opportunity in the market while necessity based entrepreneurs are pushed by factors such as unemployment or dissatisfactions with their previous jobs (Reynolds et al., 2005). Prior literature (Block and Wagner, 2007; Acs & Varga, 2005) suggest that firms started by necessity entrepreneurs are less successful than those started by opportunity entrepreneurs and therefore should be less desirable from an economic perspective. Reynolds et al. (2002) propound that opportunity entrepreneurship has a higher contribution to economic development when considering its effect on innovation and job creation. Likewise, other studies (Zali et al.,



2013; Wong et al., 2005) have shown that opportunity based entrepreneurship has a greater impact on firm growth and job creation than necessity based entrepreneur-ship. Furthermore, Block and Wagner (2007) established that firms created by necessity entrepreneurs had an inferior performance to those of opportunity entrepreneurs.

2.3. Growth ambition of the entrepreneur. Ajzen (1991) asserts that new businesses are not started by chance but that the venturing activity is created as a form of planned behavior. However, while some entrepreneurs are eager to attain substantial growth, and ensure their businesses grow into larger ventures, other entrepreneurs do not have the growth propensity and rather prefer to remain small. The reasons for these contrasting views produce a mix bag of results. Wiklund and Shepherd (2003) elucidate that firm growth is no longer seen as a natural phenomenon that occurs until profit is maximised but rather a choice made by the business owners. These researchers established that growth ambition of entrepreneurs was positively related to actual firm growth. Likewise, Stam, Suddle, Hessels and Van Stel (2006) found that growth ambitions and availability of resource and opportunities are the necessary conditions vital for the growth of a new business.

2.4. Market orientation. Market orientation is defined by Gudlaugsson and Schalk (2009) as a form of organizational culture where employees in an organization are committed and dedicated to continuously creating superior customer value, through a sequence of marketing activities that can enhance the performance of a business. Reijonen, Laukkanen, Komppula and Tuominen (2012) observed that market orientation gives small businesses a potential competitive advantage over their larger counterparts. That is because SMEs are usually closer to customers and able to quickly and flexibly respond to their needs, experience less organizational bureaucracy and thus are able to distribute customer information and implement marketing plans quickly. Studies (Gronroos, 2006; Gudlaugsson and Schalk, 2009) have established that market oriented companies turn to perform better than companies that are less market oriented as they focus on adapting their products and services based on the needs and expectations of their customers. Market orientation has been identified as the key to successful business performance and growth (Dauda and Akingbade, 2010; Gronroos, 2006). Similarly, other studies by Pulendran, Speed and Widing (2003); Matsuno, Mentzer and Özsomer (2002) established



that market orientation enhances the market share, profitability, return on investment (ROI), and market growth of businesses.

2.5. Innovativeness of the SMEs. Walsh et al. (2009) considers innovativeness (continuous innovation) as “an organization-wide strategic mindset and attitude towards innovation possessed to some degree by all firms; composed of an embedded cultural willingness, propensity, receptivity, market responsiveness, commitment, intention and technological capacity to engage in risky behavior and to rapidly incorporate change in business practices through the [early] creation and/or adoption of new ideas that facilitates innovation and delivers a superior competitive advantage”. Innovation is the characteristic tool of entrepreneurs as it is a means of exploiting change to accomplish different businesses or services and also an important factor in firm survival, growth, development and success. Innovativeness is vital in sustaining SMEs in the current turbulent business environment. An important function of SMEs is their ability to innovate and challenge incumbents with their creative products/ service offerings (Shane, 2003). Goedhuys and Veugelers (2012) stress that combining product and process innovation is vital for significantly improving the success and growth of SMEs. Choi and Williams (2012) identified a significant positive relationship between innovativeness and sales growth among Chinese firms.

3. Methodology

3.1. Data collection. This study employed a questionnaire survey approach to collect the data used for determining the factors that make up high quality SMEs in South Africa that contribute to SME growth. Self-administered questionnaires were distributed to the respondents and the questionnaires were later collected at a prearranged time. The questionnaire was pretested twice through structured interviews with two different groups of four SME owners and the results were used to redesign and eliminate questions that were blurred. The questionnaire was structured to include general demographics, self-reported measures of SME growth (sales growth, employment growth and asset growth) and the selected cohorts of SME quality (the available human capital of the SMEs; the motivations of the entrepreneur (opportunity vs. necessity); growth ambition of the entrepreneur; market orientation of the SME and the innovativeness of the start-up SME).



3.2. Population and sampling. The population for the study comprised of entrepreneurs in Bloemfontein, Botshabelo and Thaba’Nchu (Free State province in South Africa). In order to reach a significant number of SME owners, notable organizations like the Free State development Corporation (FDC) and Small Enterprise Development Agency (SEDA) database of SMEs were used for sampling. The researcher obtained a list of contact details of entrepreneurs from these organisations and contacted them at their various business locations to administer the questionnaires. A total of 300 questionnaires were issued of which 200 were fully completed and returned. The respondents were mainly owner-managers who were actively involved in the business day-to-day operations, as this study is of the view that their perceptual measures could be valid in establishing the rate of SME growth and quality of their SMEs. Simple random sampling technique was applied to the list of SME owners obtained from SEDA and FDC.

3.2.1. Measurements Table 1 below highlights how each of the SME quality factors was measured as well as the studies from where the measurements were taken.

Table 1. Measures used for the different factors of SME quality

Factors of SMEs quality	Variables	Studies drawn from
Available human capital of the SMEs	Level of education, and years of working experience.	Lafuente and Rabetino (2011), Fatoki (2011).
The motivations of the entrepreneur	Reasons for starting a business (necessity vs opportunity entrepreneurs).	Block and Wagner (2007), Reynolds et al. (2002).
Market orientation	Customer oriented, competitor oriented, interfunctional coordination.	Johnson, Dibrell and Hansen (2009).
Growth ambitions	Growth propensity, perceived ability and need for growth	Duta and Thomhil (2008).



Innovativeness	Simplified product innovation profile score (PIP-Score) methodology. Variables used included product dimension attributes and process dimension attributes.	Maravelakis et al. (2009), Goedhuys and Veugelers (2012).
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SME growth. Following prior studies (Sirec & Mocnik, 2010; Shepherd & Wiklund, 2009; Isaga, 2012; Achtenhagen, Naldi & Melin, 2010; Levie & Autio, 2013), the actual SME growth was measured in terms of employment growth, sales growth and asset growth. Self-reported data on the three components of firm growth was obtained by means of a questionnaire. The respondents were provided with items in which they indicated whether their business has either increased, stayed the same or decreased from the time of inception for each of the three components of SME growth.

4. Results and discussion

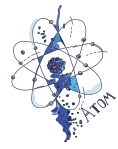
4.1. Profile of respondents. The respondents comprised of 113 male and 87 females. 62.5% of the respondents were below 30 years of age and 48% of the respondents had attained a university qualification. In terms of human capital, only 30% of the business owners had more than two years of prior business experience in addition to a post matric education. Also, 41% of the SME owners showed an Table 2 provides the correlation coefficients (p-value in parentheses) of both the dependent and independent variables. The results indicate a significant positive relationship between human capital and employment growth. This is in line with a study by Lafuente and Rabetino (2011) which also ambition to grow their business in the next five years while 59% showed no ambition to grow the business. This is in line with prior studies who explicate that most SME owners intentionally refrain from growth or are simply not interested in growth (Wiklund et al., 2003; Gundry and Welsch, 2001). 38.5% of the SMEs engage in some form of process or product innovation while 61.5% do not. Likewise, only 35.5% of the SMEs were market oriented while 64.5% were not. Furthermore, 79.5% of the SMEs are owned by necessity entrepreneurs. This is a call for concern as prior studies (Block and Wagner, 2007; Acs & Varga, 2005) have indicated that firms started by necessity entrepreneurs are less successful than those started by opportunity entrepreneurs. This could possibly explain the high failure and low



growth rate amongst SMEs in South Africa. This high rate of necessity entrepreneurship could be a result of the push effect of the high unemployment rate in the country.

indicated that human capital positively affected the employment growth of small businesses in Romania. Likewise, human capital has a significant positive relationship with sales growth which confirms the findings of Haynes (2003) that businesses started by entrepreneurs with prior industry experience produced nearly 80% greater sales revenues than their counterpart. It is also important to note that in addition to education and prior experience, SMEs require managerial competencies as prior studies (Mappigau & Agussalim, 2013; Baum & Locke, 2004) have shown that managerial competencies have a positive impact on SME performance and growth. Moreover, as the SME continues to grow, it becomes imperative for the entrepreneur to employ people with adequate skills to sustain the growth momentum of the SME. This is in line with prior evidence indicating that adequate skills are obligatory for SME growth and survival (Gibbons & O'Connor, 2005; Shah & Goldstein, 2006). Other skills that are vital for enhancing business practices and opportunity exploitation as indicated in prior studies (Neneh & van Zyl, 2012; Baum & Locke, 2004; Laguna, Wiechetek & Talik, 2012) should also be taken into account when developing the required human capital of an SME.

Also noticeable is the significant positive relationship between market orientation and sales growth which is in line with a study by Dauda and Akingbade (2010) who established that market orientation has a positive relationship with sales growth. Similarly, innovativeness has a significant positive relationship with sales growth which confirms the findings of Choi and Williams (2012). Innovativeness is an important component of SME quality because prior researcher (Cabral & Nlemvo, 2009) has shown that innovativeness results in the creation of export oriented SMEs which often experience high growth compared to their non-export oriented peers (Oviatt & McDougall, 1995; Zhou, 2007; Sapienza, Autio, George & Zahra, 2006; Kuemmerle, 2002). Additionally, export orientation has been acknowledged as some form of growth ambition when explaining why export oriented firms grow more than non-export oriented firms (Zahra, Ireland & Hitt, 2000). This is in line with the findings in this study which indicates a significant positive relationship between growth ambition and SME growth (sales and employment growth). As such, in order to increase the growth propensity of SMEs in South Africa, it is imperative for innovative



and growth oriented firms to adopt and export oriented mentality in order to increase their growth opportunities. This export orientation could either be in the form of direct sales international markets or subcontracting with multinationals as explicated by Cabraol and Nlemvo (2009). However, a key constrain still remains the fact that most of the SMEs are not innovative and do not have growth ambitions. As such, it is also vital to start with ensuring that the SMEs develop these vital quality factors before adventuring into international markets.

Furthermore, the significant positive relationship between motivation and employment growth supports the view of prior studies (Reynolds et al., 2002; Zali et al., 2013; Wong et al., 2005) that opportunity entrepreneurs have a higher marginal effect on economic development in terms of job creation. Necessity entrepreneurs generally have fewer employees and a lower growth ambition when compared with opportunity-driven entrepreneurs (Poschke, 2010). However, studies (Gindling & Newhouse, 2012; Grimm, Knorringa & Lay, 2012) have shown that some necessity-driven entrepreneurs perform extremely well. This study confirms these prior views as is seen that 15.7% of the necessity-driven entrepreneurs significantly contribute to employment growth. Because of the marginally high number of necessity entrepreneurs in the developing world, the effect of the few high performing necessity entrepreneurs might easily be overlooked. Furthermore, necessity-driven entrepreneurs are able to survive for a longer periods of time with little earnings (Hamilton, 2000). As such, during this time they develop vital business knowledge and experience which can enable them to identify opportunities for exploitation to foster their business growth or start new opportunity based ventures. On the other hand, Block and Sander (2009) explicate that opportunity driven entrepreneurs usually have high expectations of the potential business opportunity and when they encounter disappointing initial returns, they hastily close down the venture to look for new opportunities. This indicates that while opportunity-driven entrepreneurs are high job creators they can also be high job destructors. Therefore, when trying to use entrepreneurship as the basis for job creation, it is imperative for governments to develop highly selective policies that take into account the differences between opportunity and necessity driven entrepreneurs in order to fully exploit the potential of each entrepreneurial venture.

4.3. SME quality. The correlation results established in Table 2 above provides valuable insights on how the individual factors of



SME quality influence SME growth. Since all the five SME quality factors have been seen to have a significant relationship with at least two or all the three components of SME growth, it is plausible to assume that the more of such factors an SME has, the higher its quality. To determine how the quality of an SME impacts on its growth potential, this study distinguishes between high and low quality SMEs based on the number of the five SME quality factors that the SME owner possesses. A SME quality scale is used which is based from zero to five, with zero being the lowest quality SME and five representing a high quality SME. The SME quality scale ratings are explained in Figure 1 below.

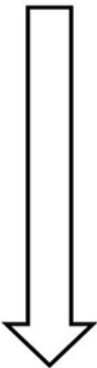
	Ratings	Description
High SME Quality  Low SME Quality	5	SMEs with a rating of 5 have all the five factors of SME quality
	4	SMEs with a rating of 4 have four out of the five factors of SME quality
	3	SMEs with a rating of 3 have three out of the five factors of SME quality
	2	SMEs with a rating of 2 have two out of the five factors of SME quality
	1	SMEs with a rating of 1 have only one out of the five factors of SME quality
	0	SMEs with a rating of 0 have none of the five factors of SME quality

Fig. 1. Ratings and description of SME quality

The results from Figure 2 show that only 4% of the SMEs have all the five components of SME quality. Also, more than 50% of the SMEs have below two factors which is a call for concern. Fritsch and Schroeter (2011) call attention to the fact that the quality of start-ups is of crucial importance for then- effect on economic development. With many SMEs being of low quality, their growth rate will be extremely poor and this will affect their general contribution to economic development especially in the domain of job creation which is highly needed in South Africa at the moment. Furthermore, the fact that over 75% of the SMEs have less than three of the SME quality factors explains why Willemse (2010) established that about 75% of SMEs in South Africa do not grow to become established firms. The only way South African SMEs are going to grow and contribute to the country's economic development



and job creation is by increasing their quality. SMEs need to identify the qualities they lack and try to develop them. The causal relationship between SME quality and SME growth is provided in the structural equation model below.

4.4. Relationship between SME quality and SME growth. Following recent studies (Coad et al., 2013; Haltiwanger et al., 2013; Lawless, 2014), this study acknowledges the need for controlling the effect of firm age when evaluating the impact of SME quality on firm growth (employment, sales and asset growth). Based on this acknowledgement, the following hypotheses were developed and will be tested using structural equation modelling (SEM).

Table 3. Hypothesized relationship between SME quality and firm growth

Hypot thesis 1	H1 .0	SME quality has no effect on employment growth after controlling for the effect of firm age.
	H1 .1	SME quality has a significant effect on employment growth after controlling for the effect of firm age.
Hypot thesis 2	H2 .0	SME quality has no effect on sales growth after controlling for the effect of firm age.
Hypot thesis 2	H2 .1	SME quality has a significant effect on sales growth after controlling for the effect of firm age.
Hypot thesis 3	H3 .0	SME quality has no effect on asset growth after controlling for the effect of firm age.
	H3 .1	SME quality has a significant effect on asset growth after controlling for the effect of firm age.

Kock (2011) explicates that when controlling for the effect of a factor in SEM, all that needs to be done is to include the factor in the model with a direct link pointing at the dependent variable. In determining the results, the significance of the path coefficient between the independent variable (SME quality) and the dependent variable (SME growth) is the main focus and is reported for the hypothesis irrespective of whether the path coefficients between the control variable (Firm age) and the dependent variable (SME



growth) are significant or not. The SEM path diagram is presented in Figure 3 below.

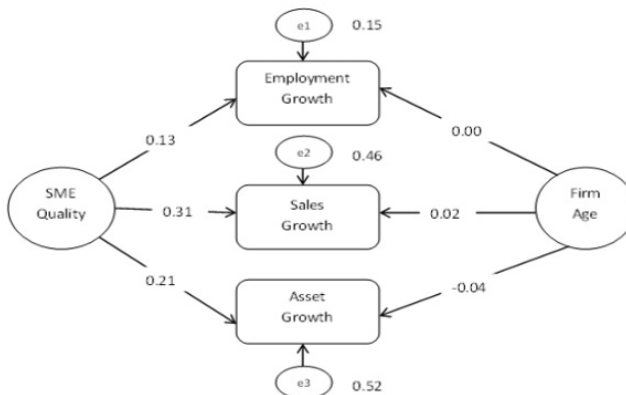


Fig. 3. SEM path diagram between the dependent variables (employment growth, sales growth and asset growth) and independent variables (SME quality)

The SEM path diagram in Figure 3 indicates the different path coefficients explaining the relationship between SME quality and the different components of SME growth. The positive path coefficients indicate a positive relationship between SME quality and all the three components of SME growth. This shows that as the quality of an SME increases, its potential to grow in terms of job creation, sales growth, and asset growth also increases. The significance of each of the relationships established in the path diagram is indicated in Table 3 below.

Table 3. Casual relationships for structural equation model based on SMEs growth and SMEs quality

			Parameter estimate	Standard error	Critical ratio	p-value	Null hypothesis	Decision
Employment growth	<-----	SME quality	0.126	0.021	6.035	***	H _{1.0}	Reject
Sales growth	<-----	SME quality	0.306	0.036	8.463	***	H _{2.0}	Reject
Asset growth	<-----	SME quality	0.208	0.038	5.461	***	H _{3.0}	Reject
Employment growth	<-----	Firm age	0.002	0.022	0.013	0.910		
Sales growth	<-----	Firm age	0.017	0.037	0.462	0.644		
Asset growth	<-----	Firm age	-0.037	0.040	-0.928	0.353		

Note: *** Significant at 1%.

The results from Table 3 show that all the path coefficients between SME quality and the three components of SME growth are significant at the 1% level. As such, all three null hypotheses are rejected, thus concluding that the SME quality affects SME growth in terms of employment growth, sales growth, and asset growth regardless of the age of the SME. These findings are in line with studies in the developed world (Fritsch and Schröeter, 2009; Fritsch, 2011) that have indicated that high quality firms create more jobs and contribute more to economic development. It is therefore vital for the government and policy makers in South Africa to encourage

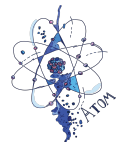


the development of these high quality factors among SMEs if they want to increase the job creation abilities of the SMEs.

Conclusion

There is currently a growing interest in using the SME sector in South Africa as a catalyst for economic growth and poverty reduction as seen in the newly created ministry of SMEs. A key policy of the current South African government is to use the SME sector as the mainstream medium of job creation for the many unemployed youths. One way this can be achieved is to foster growth among SMEs in South Africa. The findings in this study bring forth several policy implications that could be potentially useful for the newly created ministry of SMEs. This study showed that the quality of a SME measured in terms of (human capital, growth ambition, innovativeness, motivation and market orientation) significantly affects the growth of a SME in terms of employment, sales and asset growth irrespective of the age of the SME. It is vital to ensure that these SME quality factors are developed and enhanced among SMEs in South Africa as this study showed that over 50% of the SMEs had less than two of these factors. These suggestions are in line with other studies in South Africa (Fatoki, 2011; Herrington et al., 2009) which have also called on the need for the development of skills and competences among the SME sector to boost performance. It is imperative for SME owners in South Africa to note that skills development is not a once off phenomenon as several studies (Collier, Green, Kim & Peirson, 2011; Dumas & Hanchane, 2010; Albizu, Olazaran, Lavia & Otero, 2011; Ebiringa & Okorafor, 2010) have indicated that continuous training and education of employees has a positive significant effect on firm competitiveness, performance and growth. Since most of the initial employees of SMEs are either unskilled or semiskilled workers, providing continuous education and training to the workers will also contribute to the human development of South Africans. As such, government efforts to foster skills development should provide incentives for SME owners who engage in continuous skill development of their workers as a means to encourage skills development in the SME sector.

Furthermore, prior government efforts have aimed at simply increasing the number of new business. However, the rate of unemployment has remained high and many SMEs continue to fail and thus do not provide their benefits to the economy. It is therefore



imperative for the new Ministry of SMEs to adopt the workable solution from the developed world which has shown that focus should be on increasing the number of high quality start-ups and not simply the number of start-ups (Fritsch and Schroeter, 2009; Fritsch, 2011). Neneh and Smit (2013) in a review of high growth SMEs in South Africa showed that 6% of high growth SMEs contributed 26% more jobs than the other 94% of SMEs. Based on the empirical findings in this study, it is recommended that the South African government should start focusing on enhancing the quality of SMEs if they are to reap the much expected benefits of the SME sector in terms of job creation and broader aspects of socio-economic development.

In culmination, while it is important for the South Africa government to provide support for SMEs to enhance their quality, it is also imperative to ensure that there is an environment for SMEs to thrive. This is in line with prior evidence that indicates that the social, political and economic environment plays a vital role in ensuring the success, growth and performance of SMEs (Gjini, 2014; Adarna, Jouali & Arwata, 2013; Ajagbe, 2012). Sales and employment growth are key measures of SME growth and these factors can be highly affected by environmental factors like inflation and GDP growth. Factors like inflation, interest rates and crime are high in South Africa and have been shown to affect SME survival and growth (Neneh, 2011; Fatoki & Gawe, 2010; Ighthelm & Cant, 2002). As such, it is imperative for the government to take into account all such environmental factors in an attempt to develop an enabling environment for high quality SMEs to thrive and attain their full potential.

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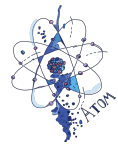
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