

*Full Length Research Paper*

# Obstacles to the growth of new SMEs in South Africa: A principal component analysis approach

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The paper investigated the obstacles to the growth of new SMEs in South Africa using the principal component approach. New SMEs are seen as a significant component of the solution to South Africa's development issues. However, most new SMEs do not grow; their failure rate in South Africa (75%) is one of the highest in the world. The objective of the study was to investigate the internal and external environmental obstacles to the growth of new SMEs. As a new business develops, it exists and survives in an environment characterized by both internal and external factors which impact negatively on the new business' survival. Thirty variables were identified as obstacles. The principal component analysis with varimax rotation was used to reduce the variables to five clusters. The most important obstacle was termed Financial which is largely an internal factor. The other obstacles respectively as determined by the PCA were Economic (external), Markets (external) Management (internal) and Infrastructure (external).

**Key words:** New SMEs, growth, principal component analysis.

## INTRODUCTION

Small and medium enterprises (SMEs) are increasingly seen as playing an important role in the economies of many countries. Thus, governments throughout the world focus on the development of the SME sector to promote economic growth. In South Africa, SMEs contribute 56% of private sector employment and 36% of the gross domestic product (Ntsika, 2002). South Africa suffers from high unemployment with an official estimate of approximately 24.5% of the economically active population unemployed (Statistics South Africa, Quarterly Labour Force Survey, 2009). One of the best ways to address unemployment is to leverage the employment creation potential of small businesses and to promote small business development (FinMark Trust, 2006).

Gree and Thurnik (2003) argued that the contribution of the SME sector cannot be sustained without the creation of new SMEs. Schumpeter (1934) as cited in Wong et al. (2005) was one of the earliest economists to argue for new firm creation. According to Schumpeter, new firms are the vital force behind the progress of capitalism. The

innovative activity of entrepreneurs feeds a creative "destruction process" by causing constant disturbances to an economic system in equilibrium, creating opportunities for economic rent. New SMEs introduce new products and develop new technologies. As an important source of innovation, new firms bring competitive pressure to bear on established firms. According to Maas and Herrington (2006) new SMEs are seen as a significant component of the solution to South Africa's development issues. The creation and sustainability of new SMEs are vital to the economic prosperity of South Africa. Without the creation of new SMEs, South Africa risks economic stagnation. Given the failure of the formal and public sector to absorb the growing number of job seekers in South Africa, increasing attention has focused on entrepreneurship and new firm creation and its potential for contributing to economic growth and job creation (Herrington et al., 2009).

Maas and Herrington (2006) observe that the creation of a new firm is a two-stage process. The first phase is the start-up phase, a three month period during which individuals identify the products or services that the firm will trade in, access resources and put in place the necessary infrastructure such as staff. The next phase, a period of 3 - 42 months, is when the business begins to trade and compete with other firms in the market place. Therefore, a new SME can be described as an SME that

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**Abbreviations:** SMEs, Small and medium enterprises; PCA, principal component analysis.

**Table 1.** Schedule of size standards for the definition of SMEs in South Africa.

Type of firm	Employees	Turnover	Balance sheet
Small	1-49	Maximum R13m	Maximum R5m
Medium	51-200	Maximum R51m	Maximum R19m

Source: Government Gazette of the Republic of South Africa (2003).

has been in existence for less than forty-two months. Once a firm has successfully existed for more than 42 months, it becomes an established firm. In addition, a new SME in South Africa must meet the qualitative and quantitative definitions of a SME as prescribed by the National Small Business Act.

The National Small Business Act of South Africa of 1996, as amended in 2003, describes an SME as “a separate and distinct entity including cooperative enterprises and non-governmental organizations managed by one owner or more, including its branches or subsidiaries if any is predominantly carried out in any sector or sub-sector of the economy mentioned in the schedule of size standards and can be classified as a SME by satisfying the criteria mentioned in the schedule of size standards” (Government Gazette of the Republic of South Africa, 2003). The quantitative definition of SMEs in South Africa is expressed in Table 1.

However, despite the noted contributions of new SMEs, their failure rate in South Africa is one of the highest in the world. About 75% of new SMEs in South Africa do not become established firms. According to Von Broembsen et al. (2005) the probability of a new SME surviving beyond 42 months is less likely in South Africa than in any other GEM sampled country. This implies that new SMEs will not be able to fulfill their developmental roles in South Africa. The focus of this study therefore is to investigate the obstacles to the growth of new SMEs in South Africa. This study used the principal component analysis (PCA) approach. PCA is often used to group together variables that are highly correlated into principal components and as a result, bring a simplification to analysis. Five variables emerged as the dominant factors that cause new SMEs to fail at their early stages. PCA brought out five factors for analysis.

## THEORIES OF GROWTH

There are many different definitions of business growth and ways of measuring this growth. Business growth is typically defined and measured, using absolute or relative changes in sales, assets, employment, productivity, profits and profit margins. Sales data are usually readily available and business owners themselves attach high importance to sales as an indicator of business performance. In addition, sales growth is also easier to measure compared with some other indices and is much more likely to be recorded. Sales are a good indicator of

size and growth. Sales may also be considered a precise indicator of how a firm is competing relative to their market (Barringer et al., 2005). According to Churchill and Lewis (1983) as a new small firm starts and develops, it moves through some growth stages, each with its own distinctive characteristics. Churchill and Lewis (1983) identified five stages of growth: existence, survival, success, take-off and resource maturity. In each stage of development a different set of factors is critical to the firm's survival and success. The Churchill Lewis model gives an insight into the dynamics of SME growth, including the distinguishing characteristics, problems and requirements of growing SMEs and explains business growth processes amongst SMEs. The precise moment in time in which a start-up venture becomes a new business has not yet been theoretically determined. However, the idea of business survival could be equated with a firm that has fully completed the transaction to stage-two organization in the five stages of small business growth. The real issue in new firm growth is that most new SMEs in South Africa do not move from the first stage (existence) to other stages such as survival, success, take off and resource maturity.

## EMPIRICAL LITERATURE

In South Africa, Berry et al. (2002) argued that new SMEs are unlikely to be a panacea for South Africa's economic problems and they query the degree to which SMEs fulfill all the government prescribed roles. Despite the best effort of the South African government, new SMEs have achieved limited growth. The Accelerated and Shared Growth Initiative South Africa (2009) indicates that on average a growth rate of 5% between 2004 and 2014 is needed to achieve the social objective of the government and expects SMEs to contribute significantly to the expected growth rate. However, new SMEs do not always contribute towards the promotion of economic growth. Although SMEs exhibit higher growth rates in percentage terms, most new small firms do not grow at all as they are established as last resort (necessity) rather than first choice (opportunity).

### The business environment

According to Delmar and Wiklund (2008) the business environment has a significant impact on the growth of

new small enterprises. Smit et al. (2007) define a business environment as all those factors or variables, both inside and outside the organization that may influence the continued and successful existence of the organization. Beck and Demircuc-Kunt (2006) argued that for new SMEs to grow, it is important to strengthen not only the internal business environment but also the external environment. Changes in the business environment have either a negative or positive effect on the growth or failure of SMEs in much of Africa (World Bank, 2006). This business environment can be divided into the internal and external environment.

### **Internal environment**

These are factors in a firm's environment that are largely controllable by the firm. The internal environment includes factors such as finance (especially internal finance such as owner's equity contribution and collateral), managerial competency of the owner, location, investment in information technology, cost of production and networking (Cassar, 2004; Barbosa and Moraes, 2004).

**Access to finance:** All businesses require financial resources in order to start trading and to fund growth. Lack of access or availability can be a constraint on business growth (Cassar, 2004). Whether business owners can access adequate and appropriate finance to grow is a particular concern for policymakers. New SMEs can be financed from founders' own wealth and/or by accessing external sources of finance, whether from 'informal' sources such as family and friends, or from 'formal', market-based sources such as banks, venture capitalists and private equity firms. Once businesses are trading, further development can be financed using retained profits. According to Herrington et al. (2009) access to finance is a major problem for the South African entrepreneur. Lack of financial support is the second most reported contributor to low new firm creation and failure, after education and training in South Africa. Stiglitz and Weiss (1981) termed the lack of finance as the finance gap. FinMark Trust (2006) finds that only 2% of new SMEs in South Africa are able to access bank loans. Foxcroft et al. (2002) find that 75% of applications for bank credit by new SMEs in South Africa are rejected. This suggests that new SMEs without finance may not be able to survive and grow.

**Management skills:** Managerial competencies are sets of knowledge, skills, behaviors and attitudes that contribute to personal effectiveness (Hellriegel et al., 2008). Managerial competencies are very important to the survival and growth of new SMEs. Martin and Staines (2008) found that lack of managerial experience and skills are the main reasons why new firms fail. In South Africa, Herrington and Wood (2003) point out that lack of

education and training has reduced management capacity in new firms in South Africa. This is one of the reasons for the low level of entrepreneurial creation and the high failure rate of new ventures.

**Location and networking:** Location has impacts on the market potential and growth opportunities of new firms. Geographical proximity to either critical buyers or suppliers produces a form of enhanced environmental scanning that enables new firms to more easily identify and exploit growth opportunities in the market. This impact on the market prospect of new firms (Dahl and Sorenson, 2007). Networking is very important to SMEs both new and established and can positively impact on their performance and access to finance. Okten and Osili (2004) found that the formation of networks helps entrepreneurs to tap resources in external environment successfully. Shane and Cable (2002) agreed that networking can be used to reduce information asymmetry in creditor/debtor relationships. In addition, networks increase a firm's legitimacy, which in turn positively influences the firm's access to external financing. Ngoc et al. (2009) point out that in the absence of effective market institutions; networks play an important role in spreading knowledge about a firm's existence and its practices. Networks also help a firm learn appropriate behavior and therefore obtain needed support from key stakeholders and the general public. This suggests that networking can positively impact on the growth of new SMEs.

**Investment in information technology and cost of production:** Investment in technology and keeping up with information technology is increasingly important to all firms. Technology plays a crucial role in the development of new SMEs. Technology not only helps in evolving a multi-pronged strategy but also in maximising business opportunities. IT is perceived as essential to achieve sales. The use of technology involves cost. Computer hardware and software need to be bought and installed. New SMEs without access to capital may find it difficult to purchase necessary technology (Phillips and Wade, 2008). Smallbone et al. (2003) found that, the cost of production can affect the growth of new SMEs. Rising cost of inputs in South Africa especially the cost of electricity and petroleum can constrain growth. Close monitoring of costs of production is necessary in order to reduce wastage and determine the most efficient means of production.

### **External environment**

Beck (2007) argued that the performance of new SMEs can be influenced by both firm-specific (internal factors) and systemic factors (external factors). Systemic factors or state variables include factors such as the contractual and informational frameworks, macroeconomic

environment, social factors (crime, corruption and ethics) technology and the regulatory environment. These state variables are largely uncontrollable by new SMEs.

**Economic variables and markets:** Economic factors have a direct impact on the potential attractiveness of various strategies and consumption patterns in the economy and have significant and unequal effects on organizations in different industries and in different locations. Economic variables include the fiscal and monetary policies of the government, inflation, interest rates and foreign exchange rates. These variables influence the demand for goods and services and hence the growth of new SMEs (Ehlers and Lazenby, 2007). South Africa's current economic environment is characterized not only by high interest rates but also by low growth rates (low consumption) high inflation rates and declining exchange rates. In addition, the country is officially in economic recession for the first time in seventeen years due mainly to the global economic meltdown. Consumption and confidence have fallen with a lot of firms showing reduced sales. Unemployment is high. All these factors can affect sales, revenues and market potential of new SMEs (The Economist, 2009). The extent of competition and potential competition also impact on the market potential and growth opportunities of new SMEs. Potential entrants are entrants that enter an industry for the first time and offer a substitute product or service to a particular sector. The potential competitor is very important in competitive industry analysis. To survive and achieve success, new firms need to understand the dynamics of competition in their industry and develop skills and competencies that give them a competitive advantage. Therefore, managers of new firms have to scan and interpret environmental changes (especially the extent of present or future competition) to maintain their firms' viability and performance (Zahra et al., 2002).

**Crime and corruption:** The United Nations Office of Drugs and Crime (2007) points out South Africa has the dubious distinction of being amongst the world's five most-murderous nations. Brown (2001) points out that business is the largest organized group suffering from crime and violence. The effect of crime on business in South Africa is not only alarming but also growing. According to the South African Police Service Crime Statistics (2009) while the incidences of virtually all major categories of crime has fallen during the past year, business related crime is on the increase. Most of these robberies were on small business premises. A survey sponsored by Standard Bank and Fujitsu Siemens Computers (2009) finds that owners of SMEs are not aggressively pursuing avenues to grow their market shares and stay ahead of competitors. Rather they are focusing on operational matters because of the high crime rate. Furthermore, crime increases expenditures or

investments in security measures to eliminate or minimize the likelihood of crime. According to Transparency International (2008), corruption both in the public and private establishments is growing in South Africa. The corruption perception index (CPI) published annually by Transparency International ranks South Africa in the 43rd with a CPI of 5.1. Gaviria (2002) argued that the reason why SMEs engage in corruption is often linked to problems with regulatory compliance and bureaucracy. SMEs lack the bargaining power and the influence to oppose requests for unofficial payments and similar solicitations. The World Bank (2005) found that about 70% of SMEs perceive corruption as an impediment to their business compared to approximately 60% for large firms.

**Labour, infrastructure and regulations:** New SMEs require access to a pool of suitably-skilled and suitably-motivated labour in order to sustain growth. Mahadea (2008) finds that it is difficult and expensive for SMEs to hire skilled labour in South Africa. Labour can only be hired at a cost and within the confines of the labour regulations such as the Employment and Minimum Wage Regulations. The quality of infrastructure can affect the growth prospects of new SMEs especially in developing countries such as South Africa. Many developing countries suffer from deplorable state of basic infrastructure like transportation, telecommunication and electricity. Electricity supply in South Africa does not meet the demand leading to power cuts which can affect the production and turnover of new SMEs (Kalra, 2009). In addition, the cost of regulation may impact on the growth of new SMEs. New SMEs have to obtain registration licences and pay taxes (Hashi, 2001). Most, new SMEs also perceive that they do not get enough support from the government. According to Maas and Herrington (2006) most new SMEs in South Africa are not aware of government efforts to assist them such as Khula Finance Enterprise (Khula) and Small Business Development Agency (SEDA).

## RESEARCH OBJECTIVES

To evaluate the internal environmental factors that are obstacles to the growth of new SMEs in South Africa (internal factors focused on by this study are access to finance, management skills, networking, investment in information technology and cost of production ). To evaluate the external environmental factors that are obstacles to the growth of new SMEs in South Africa (external factors focused on are economic environment, markets, infrastructure, crime, corruption, labour and regulations).

## RESEARCH METHODOLOGY

This study consists of two basic components as part of the research

methodology. It consists of a literature review and an empirical study. The empirical approach consists of primary research and collection of data through the use of questionnaires. Self-administered questionnaires were delivered to respondents who completed them and the interviewer collected them at an appointed time. Three sources of registered new SMEs covering East London, King Williams Town and Queenstown (Eastern Cape Province), were used to determine the population of 361. These were; The Small Enterprise Development Agency (SEDA), The Enterprise Directory sponsored by Department of Trade and Industry and Borde-kei Chamber of Business. Raosoft Sample Size calculator was used to determine the sample size taking into consideration the population size, the margin of error and the confidence level. It is in light of these considerations, Raosoft provided a sample size of 187. The instrument used in this study is the questionnaire. The questionnaire comprised structured questions which made it easy for the respondents to indicate their views. The use of five-point Likert scale questions enabled respondents to indicate their opinion on various factors of the business environment that impact on the growth of new SMEs. Reliability and validity are undoubtedly the hallmarks of good measurements and the keys to assessing the trustworthiness of any research study. First the questionnaire was pre-tested in a pilot study. In addition, the reliability of the study was ensured by using the Cronbach's alpha.

## RESULTS AND DISCUSSIONS

According to Allison (2001) a missing value may represent or is a product of an unknown value. There were only three cases of missing values and pairwise deletion method under SPSS was used. This study used the Kolmogorov-Smirnov test to determine the normality of the data because the sample size was more than 100. The normality of the data could be assumed because the significance value was greater than .05.

Table 2 depicts the mean ranking of obstacles perceived by new SMEs as inhibiting their growth. The results of Table 2 shows that variables related to finance, crime and markets are highly ranked by new SMEs as growth inhibitors. Variables related to infrastructures such as poor roads, poor water supply and poor telecommunications are lowly ranked as growth inhibitors.

### Principal component analysis

The large number of internal and external variables related to the obstacles to the growth of new SMEs made data analysis more difficult and complicated. The principal component analysis is often used to overcome this obstacle by grouping together variables that are highly correlated into principal components and as a result, bring a simplification to analysis. According to Leech et al. (2005) the principal components analysis is a data reduction technique used to reduce a large number of variables to a smaller set of underlying factors that summarize the essential information contained in the variables. The decision about which principal components to retain depends on the percentage of the variance accounted for the variable, the absolute

variance accounted for by each principal component (PC) and whether the component can be meaningfully interpreted. Varimax rotation was used to transform the components into factors that were more clearly interpretable. To facilitate an easier interpretation of principal components, factor rotation methods were developed. This research study uses varimax orthogonal rotation method developed by Kaiser (1958). Principal components with Eigen values greater than one are usually retained. According to Leech et al. (2005) the assumptions for principal component analysis include:

**Sample size:** A sample of 100 subjects is acceptable; **Normality:** Principal component analysis is robust to the assumption of normality. The normality of the data was assumed by using the Kolmogorov-Smirnov test (significance value was greater than 0.05). **Sampling adequacy:** Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure the sampling adequacy and can be used to determine the factorability of the matrix as a whole. If Bartlett's test of sphericity is large and significant and if the KMO is greater than 0.6 then factorability is assumed. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is an index used to examine the appropriateness of factor analysis. High values (between 0.5 and 1.0) indicate factor analysis is appropriate (Leech et al., 2005).

To ensure the use of principal component analysis, the Bartlett Test of Sphericity (BTS) and Kaiser-Meyer-Olkin (KMO) test of appropriateness were carried out accordingly (Table 3). The results (the BTS at 498.065 and the level of significance at  $P = 0.000$ ) indicated that the data were appropriate for the purpose of principal component analysis. The result of the KMO measure of sampling adequacy was 0.780 which indicates that there are sufficient items for each factor. The two tests support the appropriateness of the principal component analysis technique.

Table 4 shows that five components with Eigen values greater than one account for 79.556% of the total variance. According to the rules of principal component analysis only factors that have Eigen values greater than one should be retained.

According to Table 5, the first component has an Eigen value of 20.225 and percentage of variance of 45.966%. The component consists of ten items. The items included in this component include lack of access to finance (0.920). This is the item with the highest factor loading. Other items include lack of collateral 0.901; crime, 0.877, lack of owners equity contribution 0.651; bad credit record 0.606; insufficient government support, 0.601, inadequate market research, 0.589, high production costs 0.581 and corruption 0.563. Cronbach's alpha for this component yielded a value of 0.817 indicating the reliability of the cluster. Component one is labeled "Financial". Financial component is largely internal to the business. Although crime and corruption are external

**Table 2.** Mean ranking of perceived obstacles to the growth of new SMEs.

Rank	Perceived obstacle	Mean	Standard deviation	Skewness	Kurtosis
1.	Lack of access to finance	4.78	1.66	0.126	0.250
2.	Lack of collateral	4.52	1.94	0.182	0.432
3.	Insufficient owners equity contribution	4.37	1.67	0.111	0.134
4.	Crime	4.35	1.91	0.184	0.385
5.	Insufficient government support	4.24	1.81	0.156	0.543
6.	High interest rate	4.20	1.69	0.201	0.333
7	Inadequate demand	4.15	1.96	0.232	0.182
8	Inadequate market research	4.15	1.67	0.177	0.216
9	Location of the business	4.13	1.67	0.401	0.129
10	High competition	4.12	1.91	0.189	0.331
11	Bad credit record	3.75	1.83	0.307	0.121
12	High production costs	3.47	1.89	0.540	0.165
13	Lack of information technology	3.41	1.63	0.344	0.211
14	High transport costs	3.39	1.63	0.620	0.207
15	High taxes and other tariffs	3.20	1.58	0.442	0.201
16	Recession in the economy	3.09	1.63	0.234	0.500
17	Lack of experience relevant to the venture	3.02	1.58	0.267	0.305
18	Founder not familiar with market/industry	2.94	1.63	0.178	0.461
19	Lack of networking	2.76	.56	0.286	0.295
20	Lack of business skills	2.76	1.27	0.180	0.265
21	Shortage of skilled labour	2.68	1.89	0.199	0.146
22	Costs of registration and licenses	2.21	1.77	0.231	0.103
23	High inflation rate	2.07	1.93	0.204	0.152
24	High foreign exchange rate	2.01	1.68	0.109	0.327
25	Poor electricity supply	2.01	0.67	0.205	0.213
26	Lack of training	1.78	0.60	0.272	0.140
27	Corruption	1.77	1.25	0.280	0.147
28	Poor roads	1.75	1.32	0.136	0.100
29	Poor water supply	1.42	0.75	0.182	0.333
30	Poor telecommunication	1.40	1.49	0.441	0.393

Source: Data analysis for the study.

**Table 3.** KMO and Bartlett's test for obstacles to the growth of new SMEs.

Kaiser-Meyer-Olkin measure of sampling adequacy (KM O)	0.780
Bartlett's test of sphericity Approx. (Chi-square)	498.065
Df	231
Sign.	0.000

Source: Data analysis for the study.

factors, however, the negative effects of crime such as increased costs of security, replacement and repair costs impact internally on the finances of the business. Furthermore, incidences of crime can affect the sales of a firm which results with negative impact on finance.

The second component has an Eigen value of 8.432 and percentage of variance of 19.164%. The component consists of six items. These items are: high interest rate

(0.917), high taxes (0.872) and recession in the economy (0.834); high inflation rate 0.822 and high exchange rate. Cronbach's alpha for this component yielded a value of 0.804 indicating the reliability of the cluster. This component is labeled "Economic". The cluster is external, systemic and largely uncontrollable by new SMEs. The third component has an Eigen value of 2.356 and percentage variance of 5.355%. This component consists

**Table 4.** Total variance explained.

Component	Initial Eigen values			Extraction sums of squared loading			Rotation sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative (%)	Total	% of variance	Cumulative %
1	20.225	45.966	45.966	20.225	45.966	45.966	12.142	24.784	27.596
2	8.432	19.164	65.129	8.432	19.164	65.129	8.759	19.907	47.503
3	2.356	5.355	70.485	2.356	5.355	70.485	6.126	13.923	61.426
4	2.156	4.900	75.385	2.156	4.900	75.385	4.566	10.377	71.803
5	1.835	4.171	79.556	1.835	4.171	79.556	2.989	6.753	78.556
7	0.895	1.688	84.230						
8	0.779	1.498	85.728						
9	0.701	1.323	87.051						
10	0.653	1.232	88.283						
11	0.601	1.134	89.417						
12	0.552	1.041	90.458						
13	0.492	0.928	91.386						
14	0.452	0.853	92.239						
15	0.401	0.757	92.996						
16	0.369	0.696	93.692						
17	0.301	0.568	94.260						
18	0.215	0.406	94.666						
19	0.198	0.373	95.039						
20	0.182	0.343	95.382						
21	0.173	0.326	97.708						
22	0.167	0.313	97.021						
23	0.161	0.304	96.325						
24	0.157	0.297	97.167						
25	0.152	0.287	98.612						
26	0.107	0.186	98.996						
27	0.101	0.165	99.107						
28	3.988E.02	7.401E.02	99.364						
29	3.652E.02	7.111E.02	99.651						
30	3.397E.02	6.543E.02	100.00						

Extraction method: Principal component analysis.

of four items. Inadequate dem and location of the business high competition and high transport costs. Cronbach's alpha for this component yielded a value of 0.734 indicating the reliability of the cluster. The component is labeled as "Market". The component is largely external to the firm.

The fourth component has an Eigen value of 2.156 and percentage of variance 4.9%. This component consists of five items and is largely internal to the firm. The component includes lack of experience with the highest factor loading of 0.865. Other items in the component include founder is not familiar with market/industry (0.832), lack of networking 0.811; lack of business skills 0.638, shortage of skilled labour and lack of training, 0.514. Cronbach's alpha for this component yielded a value of 0.797 indicating the reliability of the cluster. The component is labeled "Management". The fifth component with Eigen value of 1.835 accounts for a variance of

4.171%. This component consists of five items. The items are; poor electricity supply 0.779, lack of personal transport 0.625, poor roads 0.514, poor water supply 0.494 and poor telecommunication 0.437. Cronbach's alpha for this component yielded a value of 0.758 indicating the reliability of the component. The component is labeled "Infrastructure" are largely external to a firm.

Table 6 shows that the most important obstacle to the growth of new SMEs is finance which is an internal factor. This is followed by economic and market which are external factors. Another internal factor which is an obstacle to the growth of new SMEs is management. The least important factor is infrastructure which is an external component.

## MANAGERIAL IMPLICATIONS

In order to overcome environmental challenges that

**Table 5.** Rotated component matrix.

Component	1	2	3	4	5
Lack of access to finance	0.920				
Lack of collateral	0.901				
Crime	0.877				
Lack of owners equity contribution	0.651				
Bad credit record	0.606				
Insufficient government support	0.601				
High production costs	0.581				
Inadequate market research	0.565				
Lack of information technology	0.543				
Corruption	0.523				
High interest rate		0.917			
High taxes and other tariffs		0.872			
Recession in the economy		0.834			
High inflation rate		0.822			
High exchange rate		0.752			
Location of the business		0.652			
Inadequate demand			0.822		
High competition			0.745		
High transport cost			0.695		
Inadequate market research			0.667		
Lack of experience relevant to the venture				0.865	
Founder is not familiar with the market/industry				0.832	
Lack of networking				0.801	
Lack of business skills				0.638	
Shortage of skilled labour					
Lack of training relevant to the venture				0.514	
Poor electricity supply					0.779
Lack of personal transport					0.625
Poor roads					0.514
Poor water supply					0.494
Poor telecommunication					0.437
Cronbach's alpha	0.817	0.804	0.734	0.797	0.758

Extraction Method: Principal component analysis. Rotation method: Varimax with Kaiser normalization.

**Table 6.** Comparison of components.

Component	Internal/external
Financial	Internal
Economic	External
Market	External
Management	Internal
Infrastructure	External

constrain SMEs from achieving growth, the following recommendations are suggested: New SMEs should be able to produce business plans that forecast cash flow requirements, have an operational plan and demonstrate viability and sustainability in order to secure debt finance. Government support agencies that can help new SMEs

with finance and training such as SEDA should be rigorously marketed to create awareness. Concessional loans for SMEs should have low interest rates in order to ease the loan burden on the emerging ventures. Thorough market research is needed to ensure that there is adequate demand for the products or services being offered by emerging SMEs. Strategic planning to determine the nature of competition and how to position the business is needed. Choice of the business location needs to be considered carefully in order to minimize distribution costs, meet demand and beat competition. There is also need to choose the product or service that appeals to customers in order to fully satisfy customer needs. Good customer care and efficient service are the hallmark of customer retention. Pricing decisions have to be considered carefully in order to beat completion as well as achieve lucrative profit margins. Provide

up-to-date training programmes that focus on the needs of entrepreneurs rather than outdated programmes that cater predominantly for general managers. Entrepreneurial trainers and consultants must themselves be well-trained and/or experienced in the specific area of expertise that they offer, for example accounting, HR or logistics. It is important to include technology in the school curricula as well as adult education programmes to ensure that the wider population becomes more familiar with technology. It is beneficial to the growth and sustenance of new SMEs to have reforms in the regulatory environment in order to reduce red tape and lengthy procedures in the registration of new businesses. Crime and corruption in both the public sector and the business community need to be dealt with decisively. Tax incentives need to be put in place to favour new venture creation and development. Inflation targeting and interest rates reviews should consider the new SMEs. Transport and communication facilities as well as reliable power must be provided in rural and urban areas. Liberalization of the telecommunications sector to allow for increased competition is vital to assist in bringing down the cost of telecommunication.

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