FACTORS THAT INFLUENCE GROWTH OF SMALL AND MEDIUM ENTERPRISES IN KENYA

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Abstract

ILO, 2015 report underscored the importance of the SMEs sub sectors in promoting growth in incomes and employment in developing countries. However, various economic policies and strategies which have been pursued to support the development of SMEs have not significantly contributed to local economic development. Various reforms have been undertaken but they have not been able to bring about a robust SME sector in Kenya. Although the factors affecting SME growth have been studied intensively from a theoretical perspective, empirical evidence has not been fully explored. The main objective of the study was to identify the factors which influence the growth of SMEs in Kenya for the period 1998-2014. The study is of great importance since an ability to identify these factors and their influence on SMEs growth is paramount to the economic stability of the country. The study has adopted Gbetnkom (2012) model in establishing the factors which influence SMEs growth in Cameroon. Annual time series data running from 1998 to 2014 has been used. The study has used OLS method to estimate the long-run equation. The estimated results show that SMEs growth in Kenya is positively influenced by the literacy level of the entrepreneur. Increase in corruption level of the country and the lending rate negatively affects SMEs growth in Kenya. The main policy implications derived from the study is that Kenya’s future direction of policy framework lies on the above factors which influence SMEs growth and therefore necessary policies should be formulated to influence their impacts.

Keywords: Small and Medium Enterprises (SMEs), factors, Kenya

INTRODUCTION

This section shows the introduction to the study. It also illustrates the background to the study, the statement of the research problem, research questions, and objectives of the study and the justification of the study. It will also give the scope and the structure of the study.

1. Background

Small and informal Enterprises are given different definitions depending on the country in which they are based and also within different sectors. Definition differs in the break points the employ and also in the underlying basis used for classification (Ayyagari, Beak and Dermirguc-Kunt, 2003). Some of these definitions are based on quantitative measures for instance; the number of people employed and turnover or assets, while others employ quantitative approach (Meredith, 1994). In Kenya, classification of such firms is majorly based on the number of people employed (Republic of Kenya, 1992). The firms which employ less than five employees are classified as micro-enterprises whereas those that engage five (5) to forty nine (49) employees
are classified as small-scale enterprises. Those which engage fifty (50) to ninety nine (99) employees are classified as medium enterprises. The highest classification is known as large-scale enterprises and these are those firms that employ one hundred or more employees.

Small and medium-sized enterprises make crucial contributions to job creation and income generation; they account for two-thirds of all jobs worldwide. Therefore, the promotion of SMEs has been a key area of intervention for the ILO. Its advisory services on SME policies are in high demand among ILO member countries. This demand has become even stronger in recent years in view of the major employment challenges in many developing and developed countries. Many international agencies are working on SME promotion, and the ILO is perceived as an important partner. It provides added value because of its focus on both the quantitative and qualitative aspects of employment creation and the fact that it serves constituents that provide a large potential outreach (ILO, 2015).

The SMEs sector not only has capacity to create employment but also capacity for the industrialization of the economy, thus also help in achieving the national development objectives. However, as mentioned in the general introduction, SMEs in Kenya also face constraints such as lack of credit, infrastructure, harassment from local authorities and stringent government laws and regulations such as taxation and lack of incentives (Beck & Dermiguc-Kunt, 2006).

In addition to the direct economic effects of making new services and products available and creating employment, the SME has several equally important effects on the functioning of transitional societies that move through more indirect channels. The development of this sector is essential to create the political and social ‘environmental conditions’ necessary to allow desirable changes to occur elsewhere in the system. The SME sector must simultaneously absorb resources and workers from the large enterprise sector and at the same time help to create a labour market situation in which the process of reorientation and fundamental reorganization of the large enterprise sector can be carried through without threatening social peace. In addition to slowing down the restructuring process, the failure to develop the SME may increase the volume of required transfer payments for unemployment, early retirement and other programmes and (under certain fiscal policy assumptions) crowd-out investment and other employment creating expenditures (Oualalou, 2012).

2. Challenges Facing Small and Medium Enterprises in Kenya

Kenya’s small and medium enterprise sector faces many challenges. These challenges include:

**Information Access**

According to Matovu and Obura (2011), SMEs need to have access to adequate information to enhance productivity and to facilitate market access. The establishment of an active SME sector and the effective utilisation of quality business information - has been identified as crucial in attaining long-term and sustainable economic growth for developed and developing countries, alike Corps (2005). According to Strong, Lee and Wang (1997), poor information quality can create chaos. Unless its root cause is diagnosed, efforts to address it can be worthless. According to Ladzani (2001), the priority ranking of the SMEs needs, clearly puts information provision at the top of the list of services to be provided. The SMEs development is hampered by an “information-poor” environment (Matovu & Obura, 2011).

**SMEs Bidding Winning Tenders**
Measurement of successful bidding entails various factors that need to be put in place so as to be sure that the bidder wins the tender each and every time he/she bids. Jonathan Farrington (2012) insists that some of the important factors that constitute successful bidding are: Perceived quality of a company’s products/services, Relationships with existing or potential customers, Position of the company in its market place, The company’s overall image and finally The company’s track record in similar projects. According to Farrington, there are as well issues that suppliers have to consider in order to complete successful bid negotiations and these issues include guaranteeing quality, delivery dates and after sale services, preparing a detailed bid documentation, developing a clear objective for the negotiation and making the first formal presentation of the bid.

Jonathan Farrington (2012) tries to ask the question of why it is that some companies grow prosperous on the fruits of their success at winning major bids while others think themselves lucky to garner a few crumbs from the feast. The most effective bid winners prefer to draw a veil over those factors that make them successful. Bidding is important and according to Rothkopf and Harstad (1994), bidding is fair and, equally important such that it may make legitimate a transfer that would otherwise be suspect.

However, the bidding process can be a minefield of potential litigation, with bidders complaining of the lack of a fair and consistent approach to tendering and accusations of favoritism and corruption. This collusive tendering may only benefit specific SMEs and exclude others from the market.

**Financial Requirements**

According to Ganbold (2008), the ability of SMEs to grow depends highly on their potential to invest in restricting, innovation and qualification. All of these investments need capital and therefore access to finance. Ganbold highlights that the consistently repeated complaint of SME about their problems regarding access to finance is a highly relevant constraint that endangers the economic growth of the countries.

According to International Finance Corporation (2011), SMEs play a key role in economic development and make an important contribution to employment and GDP. Financial access is critical for SMEs’ growth and development. In their early stages of development, SMEs rely on internal sources of funding, including the owner’s savings, retained earnings, or funding through the sale of assets. According to this report, access to finance remains a key constraint to SME development, especially in emerging economies. The report continues to add that access to finance is disproportionately difficult for SMEs in LDCs, with 41 percent of SMEs in LDCs reporting access to finance as a major constraint to their growth and development, as compared with 30 percent in middle-income countries, and only 15 percent in high-income countries. Banks are wary of lending to SMEs. Loans have to be heavily securitized with personal assets, and start-ups are normally excluded from credit. Interest rates are hardly affordable. The majority of enterprises are too small for VCs to consider, and the sector is largely viewed as immature and scarcely profitable for the moment.

According to Wanjohi (2012), lack of access to credit is almost universally indicated as a key problem for SME’s. This affects technology choice by limiting the number of alternatives that can be considered. Many SME’s may use an inappropriate technology because it is the only one they can afford. In some cases, even where credit is available, the entrepreneur may lack freedom of choice because the lending conditions may force the purchase of heavy, immovable equipment that can serve as collateral for the loan. Wanjohi continues to add that financial constraints operate in variety of ways in Kenya where undeveloped capital market forces entrepreneurs to rely on self-financing or borrowing from friends or relatives. Commercial banks’ lending activities have traditionally concentrated on large enterprises and consumer credit with involvement in SME financing though not adequate to meet all SME’s needs.
3. Legal/Regulatory Framework

The legal and regulatory framework establishes the rules within which all the financial institutions, instruments, and markets operate in a given country. According to Thai (2001) apart from public procurement regulations and rules, the legal environment refers to a broad legal framework that governs all business activities including research and development (regulations dealing with safety and health of new products), manufacturing (safety and health regulations at workplace and pollution control), finance (regulations dealing with disclosure of information), marketing (regulations dealing with deceptive advertising, disclosure of product characteristics), personnel (regulations dealing with equal opportunity for women and minorities), and contracts. He continues to add that in developing and particularly transitional countries, where legal systems are not comprehensive, government contracts may need detailed provisions.

According to Puddephatt and March (2012), weak national regulatory framework is often the root of challenges facing SMEs in public procurement. In general, a strong legal framework establishes the basis for competitive and transparent public procurement process, which is relevant for large and small business alike. This makes clear and comprehensive regulation essential in enabling fair participation in public procurement for all bidders, including SMEs. Puddephatt continues to add that public procurement rules will be implemented in a country’s legislation in form of a statute or code. Sometimes, provisions will be included in the country’s constitution. He goes on to say that in South Africa, the country’s constitution writes that its system of contracts must be “fair, equitable, transparent, competitive and cost-effective”. In relation to small business, countries may specify legal quotas for public procurement suppliers and establish internal caps for SMEs.

In Kenya, for example, the proportion of government contracts awarded to SMEs according to the president’s directive should be 10 per cent. Puddephatt continues to add that abuse of public procurement systems arises largely due to weak or inconsistent enforcement of the rules. In this respect, there is still a considerable gap between the regulatory framework and its effective implementation in Kenya and what is more is that, laws tend to be manipulated for the benefit of the minority. On the other hand, Perry (2011) states that efficient procurement frameworks are thought to have a number of advantages, including value for money through centralization, reductions in bureaucracy and the establishment of beneficial long-term relationships with suppliers. However, it has been suggested that frameworks can have a negative impact on SMEs in tendering for and delivering contracts.

4. Statement of the Problem

ILO, 2015 report underscored the importance of the SMEs sub sectors in promoting growth in incomes and employment in developing countries. However, various economic policies and strategies for instance introduction of youth fund and women fund and adoption of cost effective production methods which have been pursued to support the development of SMEs have not significantly contributed to local economic development. Such policies have been centered on the development of larger enterprises and have been biased towards urban areas despite the reality that majority of the Kenyans are in the rural areas and the overwhelming majority of enterprises are SMEs. There are also indications that most SMEs are scattered, with no formal institutional framework to address their concerns. Furthermore, over 80% of the SMEs in Kenya are agro-based with limited technological innovation capacity. Although the factors affecting SME growth have been studied intensively from a theoretical perspective, empirical evidence has not been fully explored. It is in this regard that this study seeks to unravel the factors that affect SME growth in Kenya.
5. Research Questions

The study seeks to answer the following key questions;

- What are the factors affecting SMEs growth in Kenya?
- What is the trend of SMEs growth in Kenya?
- What Policies should the government adopt to support the growth and development of SMEs at the county level?

6. Objectives of the Study

General Objective

The overall objective of this study is to analyze factors that affect growth of SMEs in Kenya.

The specific objective is in three-fold, namely;

- To analyze the factors affecting SMEs growth in Kenya?
- To analyze the trend of SMEs growth in Kenya?
- To draw policy recommendation based on study findings

7. Significance of the Study

The Vision 2030 is Kenya’s economic development plan. SME sector is one of the ingredients towards its achievement. Thus study touching on SME is acceptable since the policy implications arrived at will help lay its foundation. In addition, robust SME sector will enable the government get adequate tax revenue to implement the vision 2030.

The motivation for carrying out this study is to empirically investigate the factors that influence the growth of SMEs in Kenya. Many studies have extensively discussed this area but are anchored on theoretical perspective.

LITERATURE

8. Evolution of SMEs Policies and Laws in Kenya

The revolution of government strategies on SMEs can be traced back after the ILO report of 1972 on Employment, income and equity in Kenya which recognized SMEs as important sector for creating income and employment for the Kenyan population. The sector’s importance in economic development was singled out in Sessional Paper No.1 of 1986, Economic Management for Renewed Growth (GOK, 1986), which set out mechanisms for enhancing an enabling environment for SMEs. The Government’s commitment in Sessional Paper 1 of 1986 was reinforced in the 1989 GOK report, ‘the strategy for small Enterprises, which delineated the mechanisms for removing the constraints to growth and the development of the SME sector.

A further effort by the government formulation of a policy framework on SMEs was recognized in Sessional Paper No.2 of 1992, “Small and Medium Enterprises (MSMEs) and Jua kali Development in Kenya”. The Sessional paper recommended that the relevant ministries in consultation with the Attorney general’s office address the legal and regulatory framework to support the creation of an enabling business environment for SMEs. The Sessional paper specifically recommended the need to undertake a comprehensive review and
analysis of the Acts and licenses that pertain to SMEs, especially those that negatively impacted on the growth and development of the SMEs. The paper also advocated for the formation of association to provide easy access to information to various enterprises in the country.

There are other policy documents which also declared the government’s intention to create an enabling legal and regulatory environment. For instance, the Development Plan for 1989-1993 implied that the government would speed up the already initiated review of the local authorities by laws and regulations that have proved restrictive to the development of SMEs. Moreover; the small Enterprise Policy Implementation Programme mission report of 1994 was also identified the failure to address some key issues such as legislative reform, land allocation and poor infrastructure as the main weakness inhibiting the development of the SMEs. The government also pledged to harmonize the licensing regime and simplify requirements so as to encourage commercial and industrial investment (Development Plan 1994-1996). Another Sessional paper No.2 on the development of SMEs for wealth and employment creation for poverty reduction was formulated and published in 2005. The Sessional paper spelt out some of the key measures to address business registration, business licensing and the tax regime.

9. Appraisal of the Proposed SMEs Policy in Kenya

The Ministry of Labour in collaboration with the SMEs stakeholders developed a Parliamentary Act for SMEs in 2012. The act is expected to oversee the regulation and the development of the sector. The SMEs Act 2012 was formulated as a proposed strategy to revitalize the SMEs sub sector. The enactment of the SME Act is part of the policy 22 interventions which was envisaged by the Sessional Paper number 2 of 2005 (SP No. 2 of 2005) on the Development of SMEs in Kenya. The objective and purpose of the Act is to consolidate the overall legal and institutional framework. Such framework should promote, develop and regulate Micro and Small Enterprises to achieve certain objectives. The envisaged act focuses on key concerns that directly affect the development of SMEs. The SME Act seeks to consolidate various institutional frameworks for SMEs in a one policy document. The proposed act therefore seeks to consolidate policy formulation, administration & implementation, and regulation in three institutions namely, Department of Micro and Small Enterprises, National Council for Micro and Small Enterprise (NCMSE) and Registrar of Micro and Small Enterprises Associations and Umbrella bodies.

10. Empirical Literature Review

A few studies have discussed factors that influence growth of SMEs where most of them have applied cross-sectional data. The studies have therefore ignored the changes which occur as time changes. These studies have mainly focused on identifying the factors influencing growth of SMEs. Kaskende and Opondo (2003) investigated financing of SMEs in Uganda. The study found finance accessibility and the price of getting to be important in the growth of SMEs in Uganda.

Nkonoki (2010) investigated the factors limiting growth of small businesses in Tanzania. The methodology used was planning for interviews with respondents in Tanzania. The study found out lack of motivation and drive, lack of background and experience in the business, capital constraint, lack of a proper business plan/vision, theft and lack of trust in doing business, poor management, running informal/unregistered businesses, lack of proper record keeping, lack of proper record keeping, people factor/lack of needed talent and improper professional advice and consultation to be the factors which limit growth of small businesses.
Gbetnkom (2012) investigated corruption and small and medium sized enterprise growth in Cameroon using a linear model. In his findings, corruption and frequent contact with public services negatively affect growth of SMEs. The market share, firms’ age and involvement in international trade impact positively on firm growth.

Wauffman and Wei (1999) examine whether bribery offers enterprises the possibility of avoiding excessive bureaucracy, by comparing average time wasted with bureaucratic negotiations and the level of bribery across countries. They conclude that corrupt officials may instead of speeding up economic activities, actually cause administrative delays in order to attract more bribes. Johnson et al (1998) show that corruption distorts the development of enterprises and favours the emergence of an unofficial or underground economy. Corruption reduces fiscal income especially because it favours the growth of a non-official economy. The practices inherent to rents in the official economy divert enterprises towards parallel economies where they pay fewer taxes. Such reduction in fiscal income return affects the capacity of the state in supplying important public goods such as laws and principles of ethics and this favours the more, underground economy to the detriment of public finance.

Kiraka, Kobia and Katwalo (2013) investigated Micro, Small and Medium Enterprise Growth and Innovation in Kenya. The study found out that low literacy level, lack of business knowledge, inaccessibility to credit and competition to be the factors that hinder growth of SMEs in Kenya. The study results were reached at through interviewing those who benefited from the Women Enterprise Fund.

The ILO (2005) determined an ambiguous prediction of the business environment because in some circumstances it promotes the development of small enterprises and employment creation while “in other cases the business environment inadvertently constrains employment growth, reduce the quality of small enterprise employment, and contribute to poverty through low wages and a lack of social protection”. Consequently, it seems that there could be two possible general mechanisms in which the business environments may have an impact on generating greater shares of SMEs or higher shares of employment.

Ayyagari et al., (2007) also defined that a greater share of SMEs in the economy could be either the result of a regulation framework that facilitates the constant entry, growth and exit of SMEs or the result of a stifling business regulation which imposes a burden to the private sector by, sometimes unnecessary, heavy and costly regulation of contracts, registries and hiring processes among others. In other words, Liedholm & Mead (1999) affirmed that the increasing employment share of the SME sector could be either because markets are working and providing the opportunities for entrepreneurs, or because countries’ economies are failing to provide jobs and people are forced to find refuge in activities that provide minimal subsistence support.

11. Overview of the Literature Review

From the literature reviewed, it is clear that varied approaches have been applied in analyzing factors influencing the growth of SMEs. The literature have revealed that growth of SMEs are influenced by corruption, literacy level of the entrepreneur, access to credit, corruption, sex of the entrepreneur, age of the firm, economic growth among others.

Most of the earlier researchers have concentrated on primary data to study the factors that influence growth of SMEs. From the literature review, there are only a few empirical studies that have been carried in Kenya. Furthermore, most of the studies used cross-sectional data set ignoring studying the factors overtime. Additionally, these studies are well over 10 years old and there have been recent developments that have taken place in the SME sector for instance change in the institutional framework of the sector after the promulgation
of the constitution of Kenya in 2010. These developments have had various impacts on growth of SMEs which calls for a further detailed study. This study seeks to adopt a more comprehensive approach, through studying of various factors which influence the SMEs in Kenya using longitudinal data set.

**METHODOLOGY**

**Introduction**

This section presents the conceptual framework, modeling and data analysis. The conceptual framework provides the variables that will be helpful in analyzing the data. It will also give direction towards the achievement of the set objectives.

12. Conceptual Framework

SME growth which is measured by number of successful SMEs is influenced by various factors. This study’s methodology will be similar to that of Gbetnkom (2012) in capturing the influence of various variables on the SME growth in Cameroon. The mentioned study has presented the relationship between growth of SME and independent variables linearly. The model adopted by this study is of the form as shown below;

\[ GSME = f(EG, CR, LL, CORR) \]

Where; GSME = Growth of SMEs; EG, CR, LL, CORR = vector of the independent variables. Based on Gbetnkom (2012), corruption, frequent contact with public services, market share, firms’ age and involvement in international trade affect SMEs growth. This study will adopt Gbetnkom (2012) model in analyzing the factors that affect SMEs growth in Kenya. The variables adopted by this study are literacy level, access to credit, economic growth and corruption. The relationship between SMEs growth and its determinants can thus be represented diagrammatically as shown below.

**Figure 3.1: Causal path model**

The study will therefore be helpful in developing the methodology of this study. The developed methodology will be important in helping to draw out a clear way in which Kenya’s SME has been influenced by various variables over time.

13. Model Specification

Gbetnkom (2012) has used a linear model to indicate the relationship between SME and various independent variables in Cameroon. According to Gbetnkom (2012), corruption, frequent contact with public services has
negative impact on the growth of SME. Market share, firms’ age and involvement in international trade impact positively on SME growth. This study will therefore use the same model but will use number of informal employment as a measure SME growth. The model which study will adopt will also exclude some of independent variables due to unavailability of data. The study will however, use other variables which have been proved to influence growth of SME by other studies. These variables include, access to credit, literacy level, economic growth which measured by GDP.

The Specific model will therefore be of the form:

\[
\ln(GSME) = \beta_0 + \beta_1 EG + \beta_2 CR + \beta_3 LL + \beta_4 CORR + \mu
\]

Where GSME is growth of SMEs, EG is Economic growth Rate, CR is the access to credit, LL is literacy level, CORR is the corruption, \(\mu\) is the error term. \(\beta_0, \beta_1, \beta_2, \beta_3\) and \(\beta_4\) are parameters to be estimated.

14. Dependent variables

Growth of SMEs (GSME)

Number of informal employment will be used in measuring growth of SMEs in Kenya. It is obtained from the Kenya Bureau of Statistics data.

15. Independent Variables

Economic Growth (EG)

GDP growth rate has been used by various literatures as the proxy for a country’s level of overall economic development. A higher level of overall development means that many engage in income generating activities thus increasing the performance of SMEs. However, this can only be possible if there is equal distribution of National income. Increase in economic development also leads to increase in demand for public goods and services which are produced by the SMEs. Generally, a higher level of GDP is expected to have a positive impact the growth of SMEs.

Corruption (CORR)

Corruption Perception index is used in indicating the degree of corruption of a country. Corruption hinders growth of SMEs since profits are reduced as the entrepreneurs give out bribes. Generally, a higher level of corruption is expected to have a negative impact the growth of SMEs.

Literacy Level (LL)

Literacy level is expected to negatively impact growth of SMEs. An entrepreneur who has knowledge in the management of a business will realize increased profits. Such an entrepreneur will also know how to handle challenges that may face the business. Generally, a higher level of literacy is expected to have a positive impact the growth of SMEs. Primary school enrollment will be used as a proxy for literacy level.

Access to Credit (CR)

Lending rate will be used to measure accessibility of credit due to difficulty involved in getting the exact amount of loans advanced to the SMEs sector. This is the rate that determines at which rate commercial banks will lend out money to investors. When a firm access adequate credit, it can expand its operations easily. Generally, a higher access to credit is expected to have a positive impact the growth of SMEs.
16. Data Description

The study will apply time series data running from 1998 to 2014. This period was preferred due to availability of variables that have been measured consistently. The variable of great interest is the number of informal employment in Kenya. This variable is obtained from Kenya National Bureau of Statistics economic surveys. The independent variables include GDP growth rate, corruption perception index. These two variables will be used to measure economic growth and corruption respectively. GDP growth rate will be obtained from World Bank development indicators while corruption perception index will be obtained from Transparency International data. Access to credit which is another independent variable will be measured by lending rate obtained from World Bank World Development Indicators. Finally, primary school enrolment will be obtained from World Bank World Development Indicators.

17. Estimation Technique

The study will majorly use ordinary least squares (OLS) in establishing the relationship between growth of SME and the explanatory variables. OLS is the preferred estimation technique since it is straightforward and easy to understand. Stata version 12 will be the preferred econometric package to run the required regressions since it is easier to understand and can handle time series data.

18. Data analysis and empirical results

Introduction

The focus of this section is on the analysis of the data and presentation of empirical results of the model discussed in the previous section. It starts with descriptive statistics followed by analysis of the trends of the variables used. The last part of the section presents empirical findings and a report of the model estimated.

Summary Statistics

Table 1: Summary Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSME</td>
<td>17</td>
<td>7232.87</td>
<td>2651.2</td>
<td>3353.2</td>
<td>11843.5</td>
</tr>
<tr>
<td>EG</td>
<td>17</td>
<td>4.8</td>
<td>2.37</td>
<td>0.2</td>
<td>8.4</td>
</tr>
<tr>
<td>CR</td>
<td>17</td>
<td>17.24</td>
<td>4.4</td>
<td>12.53</td>
<td>29.49</td>
</tr>
<tr>
<td>LL</td>
<td>17</td>
<td>75.31</td>
<td>8.69</td>
<td>61.85</td>
<td>85.58</td>
</tr>
<tr>
<td>CRR</td>
<td>17</td>
<td>2.2</td>
<td>0.25</td>
<td>1.9</td>
<td>2.7</td>
</tr>
</tbody>
</table>

The total observations considered in this study were 17 with five variables (one dependent and four independent variables). The number of informal employment in Kenya deviates from its mean (7232.87) by 2651.2 but ranging between 3353.2 and 11843.5. GDP growth rate deviates from its mean (4.8) by 2.37 but ranging between 0.2 and 8.4. In general the standard deviation for each variable indicates the value by which a given variable deviates from its mean. Among the variables under study, corruption perception index has the least standard deviation, an indication that it does not deviate much from its mean. Number of informal employment has the largest deviation indicating that it deviates much from the mean.
19. Correlation Matrix

Correlation of the variables is examined in the table shown below.

Table 2: Correlation matrix

<table>
<thead>
<tr>
<th>Variables</th>
<th>GSME</th>
<th>EG</th>
<th>CR</th>
<th>LL</th>
<th>CORR</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSME</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EG</td>
<td>0.5120</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>-0.4984</td>
<td>-0.4410</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LL</td>
<td>0.9028</td>
<td>0.5736</td>
<td>-0.6474</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>CORR</td>
<td>0.5988</td>
<td>0.2896</td>
<td>0.2505</td>
<td>0.4231</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

From Table 2 above, we observe the relationship existing between various variables used by this study. There is a positive association between number of informal employment and percentage annual GDP growth rate, school enrolment, primary percentage net and corruption perception index while the lending rate shows a negative association with number of informal employment. GDP growth rate has a positive association with primary school enrolment and corruption perception index while the lending rate shows a negative association with it. Lending rate has a positive association with corruption perception index while primary school enrolment has a negative association with it. Primary school enrolment has a positive association with corruption perception index.

20. Trends in the Economic Variables Used in the Study

This section analyses the movements in the variables under study. The trend runs from 1998 to 2014. To illustrate these trends, line graphs have been used.

Figure 1: Trends in the number of informal employment
From the above graph, it can be observed that number of informal employment in Kenya has been increasing overtime. This continuous increase can be linked to the recognition of the informal sector in the realization of Kenya’s Vision 2030. The official policy framework of SMEs in Kenya is contained in the Sessional Paper No 2 of 2005 whose theme is the Development of Micro and Small Enterprises for Wealth and Employment Creation for Poverty Reduction. The new SME Act thus gave direction to among others, key issues such as: the legal and regulatory environment, markets and marketing, business linkages, the tax regime, skills and technology and financial services leading to increase in the number of informal employment.

Figure 2: Trends in the GDP Growth Rate

From the graph above graph, it can be observed that GDP growth rate in Kenya has been fluctuating over time. From 1998 to early 2002, GDP growth rate was very low. This can be linked to poor economic policies during the KANU’s regime. From 2003 to 2006 onwards, the GDP growth rate increased due to sound economic policies which included the liberalization of the economy. This is the period Kenyan had ushered in a new Kibaki government. However, in 2008, there was a decrease in the GDP growth rate which can be linked to post election violence.
From the above graph, one can observe a negative trend in the Kenya lending rate over the study period. This pattern can be linked to the government dream of expanding business operations in Kenya. The aim of decreasing lending rate is to provide large amounts of liquidity to commercial banks which can be loaned to individuals.

4. Trends for Primary School Enrolment

Primary school enrolment in Kenya has been fluctuating but an increasing rate over time. This trend is in agreement with Kenya’s development model which was initiated by Kibaki’s government in 2003. The positive trend commenced in 2003 after Kenyan government introduced free and compulsory primary education.
5. Trends for Corruption Perception Index

Kenya’s corruption perception index has been fluctuating overtime. Based on the fact that countries with low corruption index witness massive corruption, then it is evident that corruption was high in Kenya in 2000 to 2002. This can be linked to craven policies and unprecedented levels of theft of public funds, public land, forests, recreational parks, school playgrounds, and buildings. During this time there were too much political scandals yet the government intervention was more of a public relations gimmick than an in-depth desire by the system to fight corruption.

The regression results are presented in table 3 below.

Table 3: Regression results

<table>
<thead>
<tr>
<th>lnGSME</th>
<th>Coefficients</th>
<th>Std. Err.</th>
<th>t</th>
<th>P&gt;t</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG</td>
<td>-0.0122614</td>
<td>0.0174388</td>
<td>-0.70</td>
<td>0.495</td>
<td>-0.0502573 0.0257346</td>
</tr>
<tr>
<td>CR</td>
<td>-0.0332094</td>
<td>0.0153637</td>
<td>-2.16</td>
<td>0.052</td>
<td>-0.0666839 0.0002651</td>
</tr>
<tr>
<td>LL</td>
<td>0.0259718</td>
<td>0.0081824</td>
<td>3.17</td>
<td>0.008</td>
<td>0.0081438 0.0437998</td>
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<tr>
<td>CRR</td>
<td>0.5681463</td>
<td>0.2286409</td>
<td>2.48</td>
<td>0.029</td>
<td>0.0699805 1.066312</td>
</tr>
<tr>
<td>_cons</td>
<td>6.235793</td>
<td>0.5360042</td>
<td>11.63</td>
<td>0.000</td>
<td>5.067941 1.066312</td>
</tr>
</tbody>
</table>

Number of obs=17
F( 4,12)= 32.44
Prob> F=0.0000
R-squared=0.9154
Adj R-squared = 0.8871
Root MSE=.13121

21. Interpretation of the Results

The results above indicate that regression did well in regard to the goodness of fit and also overall significance with an R\(^2\) of 91.54 %. This implies that 91.54 % of the variation in the number of informal employment in Kenya is explained by the explanatory variables in the model. F-statistic (0.0000) was significant at 5 percent level of significance an implication that the variables in the model were jointly significant.
The specified model will be as follows:

\[ \text{Ln GSME} = 6.235793 - 0.0122614 \text{EG} - 0.0332094 \text{CR} + 0.0259718 \text{LL} + 0.5681463 \text{CORR} \]

The results further show that when all the independent variables in the model assume the value of zero, number of informal employment will be 510.7 (antilog of 6.235793). Holding all other factors constant, the number of informal employment will decrease by 1.22614% when percentage annual GDP growth rate increases by one unit. When all other factors are held constant, number of informal employment will increase by 2.59718% when primary school enrolment increases by one unit. When all other factors are held constant, number of informal employment will decrease by 3.32094% when lending rate increases by one unit. When all other factors are held constant, number of informal employment will increase by 2.59718% when primary school enrolment increases by one unit. When all other factors are held constant, number of informal employment will decrease by 56.81463% when the corruption perception index increases by one unit (Note that the lower the Corruption Perception Index the more the level of country’s corruption).

**SUMMARY AND CONCLUSION**

The study has delved into the factors that influence growth of SMEs in Kenya over the period 1998-2014. The relationship between dependent and independent variables was estimated using a model adopted from Gbetnkom (2012). OLS method of data analysis was adopted. The study’s findings show that growth of SMEs in Kenya is determined by economic growth, lending rate, literacy level and corruption. Economic growth, lending rate showed a negative relationship with the growth of SMEs in Kenya. However, economic growth was found to be insignificant in determining growth of SMEs in Kenya at 5% level of significance. Lending rate and corruption were found to significantly affect growth of SMEs in Kenya at 5% level of significance. Literacy level is established to be positive and significant in determining SMEs growth in Kenya. F-statistic (0.0000) was significant at 5 percent level of significance an implication that the variables in the model were jointly significant.

**22. Policy Implications**

Our investigation has evidently elaborated that at aggregate level, Kenya’s SMEs growth is influenced by lending rate, literacy level and corruption. The impact of each of these variables on Kenya’s SMEs growth differs in sign and degree. Not all the variables under investigation are statistically significant in determining SMEs growth in Kenya. These findings therefore provide a pool of information which can be an important ingredient in policy formulation in Kenya.

According to the study results, the government of Kenya should aim at maintain those factors that positively affect its SME growth. It should also try to minimize those that negatively affect SME growth. With regard to the positive relationship between SMEs growth, literacy level the government should ensure these area is strengthened for it to obtain high growth of SMEs. For instance, the government should stimulate legislation of laws that will provide conducive environment for learners to access education. With regard to lending rate, the government should continue making loans affordable to investors since this will expand SMEs in Kenya. In this study, corruption has been found to negatively affect growth of SMEs in Kenya. This therefore requires the government to put good policies in place that will ensure that corruption is checked.
23. Limitations of the Study

The study did not put into account sex of the entrepreneur, age of the entrepreneur in the model as these variables can be captured well using primary data. The two variables are important determinants of SMEs growth and hence need to be included in the model in a further study.

REFERENCES


Nkonoki, E. (2010). What are the factors limiting the success and/or growth of small businesses in Tanzania.


