

**THE DETERMINANTS OF LISTING AT THE GROWTH ENTERPRISE  
MARKET SEGMENT IN THE NAIROBI SECURITIES EXCHANGE**

**BY**

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**DECLARATION**

This Research Project is my own original work and has not been presented for a Degree Qualification in any other University or Institution of learning.

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## **DEDICATION**

This paper is dedicated to my parents Mr & Mrs Nyakweba, my siblings, my husband Shem Manyura and my children: Hope Kemunto, Ryan Nyangweso and Cole Nyakweba.

This is because they have been a source of inspiration and support in the course of my studies.

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## **ABBREVIATIONS**

ACCA	Association of Chartered Certified Accountants
AIMS	Alternative Investment Segment
CMA	Capital Market Authority
GDP	Gross Domestic Product
CFO	Chief Finance Officer
GEMS	Growth Enterprise Market Segment
IFC	International Financial Corporation
IPO	Initial Public Offer
LSE	London Stock Exchange
NSE	Nairobi Securities Exchange
NOMADS	Nominated Advisers
ROI	Return on investment
ROK	Government of Kenya
SME	Small and Medium Enterprise
SMEX	Small and Medium Enterprise Exchange



## ABSTRACT

SMEs are the main source of economic growth in developed and developing countries alike (Kilonzo, 2011). In recognition of the economic role played by SMEs and their challenges in financing, Governments and private organizations have come up with strategies to increase access to financing for SMEs. Among this is the introduction of special capital market segments such as the Growth Enterprise Market Segment (GEMS) aimed at reaching the SMEs for equity financing (ACCA, 2013). Using a sample of firms from Kenya, the current study researches the effects of different variables on a firm's decision to list at the Growth Enterprise Market Segment in the Nairobi Securities Exchange. Secondary data that covered a period of five years was considered in the study, where binary multiple logistic regression analysis was used to establish the relationship between the selected factors and listing at the GEMS in the NSE. From the study the findings depicted that there is a significant negative relationship between the chances of being listed and profitability as measured by return on assets ( $\beta = -0.123$ , Wald = 0.002 and p-value <0.05). In addition, study findings showed that there was a positive significant relationship between the chances of being listed and liquidity ( $\beta = 0.019$ , Wald = 0.061 and p-value <0.05), and sales annual growth rate ( $\beta = 0.205$ , Wald = 0.476 and p-value <0.05). Since the model had an explanatory power of 35.3% future studies should investigate on other factors such as size of firm and their influence on listing at GEMS in the NSE.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the Study**

This chapter gives the background of listing at the Growth Enterprise Market Segments (GEMS). It further highlights the problem that will be addressed in this study, which involves an investigation of the determinants of listing at the Growth Enterprise Market Segment (GEMS) in the Nairobi Stock Exchange (NSE). The chapter further stipulates the objective of the study together with the research question that will be investigated.

The chapter is concluded by a layout of the value of the study.

#### **1.1.1 Listing at GEMS**

SMEs are the main source of economic growth in developed and developing countries alike (Kilonzo, 2011). In the US for example, the SME sector is said to provide 67% employment and 61% manufacturing sector output, respectively. In Korea, there are over 30 million SMEs constituting about 99.9% of the enterprises and employing over 88.1% of the labour force. Similarly, in Kenya SMEs are responsible for about 80% of employment and contributes about 40% to GDP (Kilonzo, 2011). Their operations cut across almost all sectors of the economy and sustain the majority of households.

Despite the fact that SMEs are an integral part of the economy critical in spurring socioeconomic development, numerous studies have indicated that SMEs experience so many problems. Of the many problems, it has been established that lack of access to finance is the biggest challenge affecting their survival. They not only find it difficult to access finance, but also have to deal with the higher cost of finance relative to what larger

firms face. Additionally, SME's, both formal and informal, are hard to sell as going concerns because of the difficulty there is in establishing their true market value. This makes it tough for owners / investors to quantify the value of their investment and for the business to offer stock incentives to staff and other interested parties (Wanjohi, 2010).

In recognition of the economic role played by SMEs and their challenges in financing, Governments and private organizations have come up with strategies to increase access to financing for SMEs. Among the efforts that have been made is the introduction of special capital market segments such as the Growth Enterprise Market Segment (GEMS), aimed at reaching the SMEs for equity financing (ACCA, 2013).

While the definition of SMEs varies from one country or continent to another, most of these organizations have been using the definition of the SME sector as provided by the World Bank or International Finance Corporation (IFC). In terms of need for finance, the IFC defines an SME as 'Small Enterprises' with loan size of \$10,000 to \$100,000 and Medium Enterprise' with loan sizes of \$100,000 to \$1 million (UNEP, 2007).

In many countries such as U.S.A, Britain, European Countries, Japan and Canada, small-scale business is defined in terms of annual turnover and the number of paid employees. Here, a small business is one with an annual turnover of 2 million pounds or less and with less than 200 paid employees. In these regions SMEs may also be defined based on the number of paid employees, turnover, balance sheet and level of independence of the enterprise. Based on this criteria, a small enterprise is defined as an enterprise which

employs fewer than 50 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 10 million; while a micro enterprise is defined as an enterprise which employs fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 2 million. In Kenya, the following definitions of the SME sector are applied: Micro Enterprise has 1-10 number of employees with a turnover of Kshs 0-5million, Small Enterprise 11-50 employees with turnover of Kshs 5-50m and Medium enterprises has 51-100 employees and turnover of Kshs 51million -1billion (Rok, 2009).

Growth Enterprise Market Segment (GEMS) is a stock market set up by a Stock Exchange for growth companies that do not fulfill the requirements of profitability or track record. GEMS operates on the basis of strong disclosure regime, in which case the listed companies are required to ensure frequent, timely and detailed information disclosure to the public to enable investors make investment decisions regarding them. It requires a listing applicant to disclose in detail its business history and its future business plans which are key components of the listing documents. Once listed in the GEMS, a company is required to disclose half yearly business performance against budget for the first two financial years and publish quarterly accounts, in addition to half yearly and annual accounts. On top of this, a shorter period, than in the case of the ordinary stock exchange is allowed to make available this information to the public (NSE, 2013).

Of importance to note also is that to facilitate easy access to relevant information, GEMS will normally have a separate website which provides comprehensive information covering all aspects of the market including company announcements and other

information of listed issuers, trade prices and market. The rules and regulations governing this market are designed to foster a culture of self-compliance by listed issuers and sponsors in the discharge of their respective responsibilities (NSE, 2013).

The other aspect that is of vital role is that the company listed needs a GEMS Sponsor, whose main duty is to ensure that proper disclosures have been made by the listed company. It is required to conduct due diligence and satisfy itself, to the best of its knowledge and belief, that proper disclosures have been made. A listed company is required to retain a sponsor to assist it and its directors in discharge of their listing obligations. Another important aspect is Corporate Governance. The moment a company gets listed in the GEMS, it is expected to establish and adhere to a strong corporate governance base. This is to facilitate its compliance with the GEMS Listing Rules and adherence to proper business practices (NSE, 2013).

The role of the exchange is to review the listing documents of an applicant to ensure that they comply with the Company act and the GEMS listing rules at the time of listing. After listing, the exchange similarly reviews all public announcements made by an issuer. In discharge of its duty, it is worthwhile to note that it is not the responsibility of the exchange to assess the commercial viability of GEMS applicants and also that the responsibility for the correctness, quality and sufficiency of the disclosed information by issuer rests with the issuer and its director (NSE, 2013).

The GEMS offers ethically run small and medium sized enterprises the perfect opportunity to raise funds, improve their public profile and establish their true worth in

the market. Even though GEMS operate on a buyers beware policy, it ensures that investors' funds are not put at more risk than necessary by requiring that companies seeking listing subscribe to strict corporate governance in order to be allowed on the stock exchange. Allowing price discovery on an open market provides the means by which businesses can establish the true worth of their company in the investor's eyes and devise strategies to improve and build on this perception. Because GEMS takes into account the unique operating circumstances of newly established ventures and does not require them to go through the rigorous requirements demanded from established companies that seek public listing, it is well tuned to the needs of rapidly growing businesses (Burbidge capital, 2014).

### **1.1.2 Determinants of Listing at GEMS**

Various studies have identified different factors as being determinants of listing in emerging markets. The following are some of the factors that have been cited: level of awareness of the available options in the capital market and their benefits, cost of listing, level of a firm's riskiness, level of a firm's profitability, level of a firm's sales growth, corporate governance issues in firms, the trading rules or the terms and conditions for joining the securities market and the capital structure preference of a firm ( Gravdina and Sahovsca, 2013).

### **1.1.3 Relationship between Listing in GEMS and the Determining Factors**

Access to information on GEMS affects listing in GEMS in that if the investors lack timely information, they will not know the opportunities that are available for them in this segment and how to go about utilizing them (Mwarari, 2013). The other factor, level

of riskiness in a firm, influences listing because the higher the risk inherent in a firm the higher the probability that it will list. This is mostly attributable to the diversification motive, which states that the riskier the operations of a company are, the more reluctant its owner is to make large investments and risk with his/her own capital; thus, he/she will choose to reduce the share of ownership to diversity the risk (Gvardina and Sahovska, 2013).

Because company listing is assumed to be a costly exercise, it would also mean that profitability positively affects the probability of a firm listing. Also sales growth rate indicates future financial need for sustaining growth and therefore it will have a positive relationship with probability of a firm listing in the GEMS (Albornoz and Pope, 2004).

Firms' level of corporate governance influences firms' decision to make voluntary disclosures and hence listing in that, as many studies argue, sound corporate governance mechanisms are treated as a sign that the firm in question has strong management and better monitoring in place, which in turn leads to more voluntary disclosures. Jaggi and Yee Low (2000), Eng and Mak (2003) and Chen, Xia and Cheng (2008). find some evidence to support that argument in Singapore and the United States.

Stringent trading rules in the GEMS on the other hand, may make firms shy away from listing and vice versa. This includes factors like minimum capital requirement. Favourable structures in a securities exchange are key to determining listing and development of the markets (Pardy, 2012). Finally, financing preference of a capital

structure that uses other forms of finance other than external equity will hinder listing in the GEMS and vice versa. This is as explained in the various theories of capital structure.

#### **1.1.4 GEMS at the Nairobi Securities Exchange**

There are 55 companies listed on the NSE with market capital combined value of US\$15billion (Ksh 1.3trillion) and trades of up to US\$5million (Ksh 425 million) every day but only 11 are SMEs, which is 18.33% only (NSE, 2012). Given that big business generates less than 25% of the country's GDP, it can be assumed that there is more than Ksh 5 trillion in unrealized market value sitting within the SME sector (Stella 2013). In Kenya most SMEs rely heavily on savings or bank loans for expansion capital (KPMG 2011). Bank loans have become very expensive attracting interest rates of between 23% and 29% when the central bank benchmarking rate rose to 18% (Mwarari, 2013). This problem is compounded by the fact that debt leads to a legal obligation to pay interests and principal or lead to bankruptcy. Therefore, a well-functioning securities exchange platform for SMEs is important for the sector.

In January 2013, the Nairobi Securities Exchange launched the Growth Enterprise Market Segment (GEMS) that enables companies to raise capital to drive their growth plans while benefiting from increased profile and liquidity within a regulatory environment designed to meet their needs. The GEMS segment of the NSE makes it affordable for SME's to gain access to financial resources previously the reserve of larger companies. It also allows SME's to raise their public profile and the owners and investors in SME's to realize the cash value of their investments with ease (ACCA, 2013).



Key features of the GEMS regulatory framework at the NSE include the following: First, companies can list on the GEMS with as little as Ksh 10 million share capital, turnover of up to Ksh 500,000 and less than 10 employees or turnover between Ksh 500,000 to 10 million and 10 – 50 employees. Second, companies that desire to be listed on the GEMS must have at least 100,000 shares and a minimum of 25 shareholders. Third, the companies listing in the segment must engage Nominated Advisors – NOMADS who help the companies get / stay listed on the stock exchange, serve as a coordinator between the GEMS and the company and continue to offer advice / guidance to the company throughout the period of its listing in the GEMS (NSE, 2013).

The other feature of the NSE's GEMS is that Directors of GEMS companies are required to undergo a Directors' Induction program to help them better appreciate their obligations as Directors of listed companies as well as inculcate a culture of good corporate governance practices. The NSE is primarily responsible for the regulation of GEMS market through vetting any listing applications for the GEMS market; vetting any applications for registration by NOMADS; providing first line supervision of GEMS companies; and overseeing compliance of NOMADS with their regulatory obligations (NSE, 2013).

## **1.2 Research Problem**

When the NSE launched its GEMS in January 2013, the reception from policy makers and analysts in Kenya and beyond was enthusiastic, hailing the new exchange, as an important innovation that was well timed to capitalize on investors' historically high

interest in East Africa. It was expected that through GEM segment, SMEs will be able to raise substantial initial and ongoing capital, and at the same time benefit from increased profile and liquidity, within a regulatory environment. This development was expected to augment various initiatives by both the government and the private sector to deal with the challenges facing SMEs.

Home Afrika Ltd listed in the segment as the first company four months after its launch, as it looked to raise much-needed capital for expansion. However, no other player listed at the GEMS during its first year although eighteen NOMADS had been appointed by the CMA. The expectation by the CMA was that 24 GEMS listings would be completed in ten years' time, (The NSE Website). In October 2014, Flame Tree Group became the second firm to be cleared by the CMA to list in the market segment. The slow listing at the NSE's GEMS is an issue that is of concern and therefore needs to be investigated.

In Kenya, different authors have given various reasons for the slow listing at the NSE's GEMS. For instance, it has been reported that although the stock market has introduced the GEMS, companies are not joining because of lack of awareness and information on what they could gain through a listing on GEMS. Another factor that has been identified as a hindrance to listing at the NSE's GEMS is stringent rules of the segment. For example, the Unaitas Sacco Society Limited, a savings and credit co-operative society, intended to join the NSE, but was unable to meet the listing requirements (ACCA, 2013).

It appears that a very limited number of studies on the drivers of listing exists due to the complications researchers face during the data gathering process; the fact was admitted by a number of researchers, e.g. Albornoz and Pope (2004) and Brav, A., Brav, O and Jiang, W. (2006). A number of studies, discussed further in the literature review section, concentrate on investigating domestic and foreign listings, as well as benefits, valuation and cost of capital gains associated with them.

Other global researches in relation to the determinants of listing in GEMS include the following: Caccavaio, Carmassi and Spallone (2012) discussed the problem of Italian SMEs of going public. Fadil (2012) discussed the growth choices of French listed SMEs. Lardon and Deloof (2012) investigated the financial disclosure policy of small and medium-sized enterprises listed on a stock market with very low disclosure requirements: the Free Market of the Euronext Stock Exchange.

In Kenya, it has been established that there is no empirical research explicitly addressing the issue of determinants of listing in the GEMS at the NSE. Some of the studies that can be related to this topic are as follows: Mwarari (2013) discussed the factors influencing the listing of Kenyan SMEs at the Nairobi stock exchange for capital raising opportunities. This study revealed that access to information influence listing of SMEs in the NSE to greatest extent. The study also recommends that NSE should reduce the listing requirements like the minimum assets base for listing.

Another study in Kenya by Aduda, Masila and Onsongo (2012) focused on the Determinants of Stock Market Development: The case of the NSE. The findings were that stock market developments is determined by stock market liquidity, institutional quality, income per capita, domestic savings and bank development. From their findings macroeconomic stability proxied by inflation and foreign capital inflow does not affect stock market development.

Kihimbo, Ayako, Omoka and Otuya (2012) carried out a study on financing of small and medium enterprises in Kenya with a case of selected SMEs in Kakamega Municipality. 60 SME Owner/Manager were interviewed. It was found that less than half of SMEs in Kakamega Municipality consider formal financing as a source of capital for their operations and that more than 90 percent of SMEs who sought for formal financing succeeded. These results showed that formal financing were significant to keep the business operational of SMEs in Kakamega Municipality. Overlap between various sources was observed indicating multiple sources of capital are adopted by a variety of the SMEs which includes loan from microfinance institutions and private sources (personal savings, friends and relatives).

The above studies have focused on development and listing issues in the NSE at large. This study investigated factors affecting/determining listing at the SMEs designated segment, the GEMS of the NSE, which add knowledge in the field of finance regarding securities markets and equity financing for SMEs. This study attempted to answer the following question: What determines listing at the GEMS in the NSE?

### **1.3 Research Objective**

The objective of this study was to establish the relationship between the selected factors and listing at the Growth Enterprise Market segment in the Nairobi Securities Exchange.

### **1.4 Value of the Study**

This study will be important to prospective issuers in the GEMS by exploring factors that influence their entry into the market and hence contributing to their address. This will enable SMEs take up financing opportunities for business growth. This study will also make the public and all investors appreciate the role of CMA and NSE as a tool for business growth and development.

The other significance of this study will be to the academicians and researchers. This is because it will provide literature for review on emerging capital markets as well as SMEs; that have attracted the attention of global investors and academicians alike. The study will also contribute to the bulk of knowledge and research at the School of Business of the University of Nairobi. It will be of benefit to students as it will be used as a basis of reference for future study on Growth Enterprise Market Segment in Emerging Capital markets and SMEs. Finally, the study will also help the Government, CMA, NSE and other stakeholders identify the impact and flaws in the current options available to SMEs' equity funding and in the process come up with improvement measures.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter gives the literature review of the study. The chapter gives a review of major theories and concepts guiding this study as well as of the available research material that addresses the issue of SMEs trading in the various Stock Exchanges as a guide to this study. Here, there is an attempt to put together various research and literature streams that appear to be relevant as far as listing of SMEs in the GEMS is concerned.

#### **2.2 Theoretical Review**

There are many theories which attempt to explain the determinants of listing of companies in the GEMS. The theoretic underlying this study is the one that explains the financial structure of SMEs, consequently explaining participation of SMEs in the stock market. These theories are significant steps towards the development of a systematic framework for the determinants of listing in the GEMS. The following are some of the theories that have been established to explain the capital structure of SMEs

##### **2.2.1 Life Cycle Theory**

Weston and Brigham (1981) provided arguments to explain small firm financial structure using a life cycle approach. According to this theory, the source of finance, which affects a company's financial structure, depends on the stage of development in the life cycle.

Four stages have been identified in the life cycle. They include: Start-up, Growth, Mature and Declining. As a Company moves from Start-up through to Declining stages, business risk reduces. This is supposed to be complemented by use of higher risk source of

financing. Small business may be thought of as having a financial growth cycle in which financial needs and options change as the business grows and gains further experience. Initial insider finance is often required at the very earliest stage of a firm's development when the entrepreneur is still developing the product or business concept and when the firm's assets are mostly intangibles. When the firms achieve a level of production where their balance sheets reflect substantial tangible business assets that might be pledged as collateral, then they can borrow from commercial banks. Therefore, Small firms are expected to start out using only owners' resources; if they survive the dangers of under capitalization they are then likely to be able to make use of other sources of funds such as trade credit and short term loans from banks. Rapid growth at this stage could lead to the problem of illiquidity which would follow from an over-reliance on short-term finance (Chittenden, Hall and Hutchinson, 1996).

### **2.2.2 Pecking Order Theory**

This theory suggests that firms prioritize their sources of funding starting with internal, then with low-risk debt, and finally if all fails, with equity. Therefore, the firms prefer internal financing to external financing (Myers and Majluf, 1984). This preference reflects the relative costs of the various sources of finance. Since small firms are opaque and have important adverse selection problems that are explained by credit rationing; they bear high information costs (Psillaki, 1995). Additionally, since the quality of small firms financial statements vary, small firms usually have higher levels of asymmetric information. Even though investors may prefer audited financial statements, small firms may want to avoid these costs. Therefore, when issuing new capital, those costs are very

high, but for internal funds, costs can be considered as none. For debt, the costs are in an intermediate position between equity and internal funds. As a result, firms prefer first internal financing (retained earnings), then debt and they choose equity as a last resort. The pecking order framework emerges as a good explanation of small unlisted firms' capital structure with a heavy reliance on internally generated funds being the key feature.

### **2.2.3 Agency Cost Theory**

Agency cost theory focuses on the costs which are created due to conflicts of interest between shareholders, managers and debt holders (Jensen, 1976). Small firms are likely to have more concentrated ownership. Generally, the shareholders often run the firm which decreases the conflict of interest between shareholders and managers and agency costs. This reflects the fact that stock market flotation is not only expensive to arrange and that initial public offerings are subject to under pricing which seems to be particularly severe for smaller firms, but that it may open the door to loss of control by the original owner managers and the possibility of takeovers. The use of collateral, especially for unlisted small firms, is widespread and is consistent with its being used as a way of dealing with agency problems in lending to small firms.

### **2.2.4 Trade-Off Theory**

Trade-off theory claims that a firm's optimal debt ratio is determined by a trade-off between the bankruptcy cost and tax advantage of borrowing (Scott, 1977). Higher profitability decreases the expected costs of distress and let firms increase their tax



benefits by raising leverage. Firms would prefer debt over equity until the point where the probability of financial distress starts to be important.

### **2.3 Other Determinants of Listing in GEMS**

Pardy (1992) contends that there are two basic building blocks necessary for a thriving securities market: (1) a macroeconomic and fiscal environment that is conducive to the supply of good quality securities and sufficient demand for them; and (2) a market infrastructure capable of supporting efficient operation of the securities market. Under the first precondition, the author indicates that the demand for and supply of securities is crucially linked to the state of the macro economy. If the macro economy is conducive to profitable business operation, a sufficient number of sound businesses can develop to a stage where access to securities markets is useful for their continued growth.

Pardy (2012) further explains that second precondition, the market infrastructure, is intended to make the securities markets operate in an efficient, fair and stable manner. It can be broken into three: One is the institutional infrastructure, which provides the operational basis for the market. This relates to intermediaries that provide trading, investment management and financial advisory services; market and market related service provider for stock exchanges, over-the counter markets, market information services, transaction clearance and settlement systems, and securities transfer, registration and custody; and providers of ancillary services such as accounting and auditing, legal advice, and financial valuation and debt rating services.

The second part of favorable market infrastructure condition, as explained still by Pardy (2012), is the regulatory infrastructure which not only supervises the market, but also includes self regulatory organizations such as stock exchanges, accounting standards boards and accounting and auditing professional associations and similar organizations. It also includes the rules and regulations, procedures, and facilities such as stock exchange listing trading rules or accounting and auditing standards, plus the monitoring and enforcement of these rules.

The third part of favorable market infrastructure as put forward by Pardy, is the legal infrastructure, which provides the basis for the operational and regulatory framework. It provides for property rights, contractual relationships, forms of incorporation, and rights and responsibilities of participants in the market. It also specifies the powers and responsibilities of the government supervisory authority and self regulatory organizations.

The first precondition for sound securities market development put forward by Pardy, recognizes the importance of taxation (fiscal environment). The author finds that differential effective tax rates on either income or capital gains from different financial instruments will distort capital raising and investment decisions. He supports this conclusion by observing that quite a number of developing countries with state ownership of commercial banks have tax rates that discriminate in favour of savings and demand deposits as opposed to securities investment, and in favour of borrowing from banks as opposed to raising capital from the public. For capital market development, these taxation

differentials must be removed. It has been established that differing tax treatment of equity and debt can create divergent costs in the use of retained earnings, new share issues and debt finance.

In the literature, another factor that affects the listing in the capital market is information disclosure or transparency of transaction. Versluysen (1988) indicates that in markets for publicly offered securities, investor access to information pertaining to their prospective investments is more limited than that of professional intermediaries. Investors can therefore be protected by the compulsory disclosure of financial data and to their relevant information relating to the issues of securities.

Pardy (1992) also contends that a company that raises funds from the public must be required to disclose sufficient information to allow investors make reasonable investment decision so that the aggregate of investors' decisions may be a good assessment of a company's worth. This requires an effective legal infrastructure to specify and enforce disclosure standards for all companies issuing securities for the public. Chuppe and Atkin (1992) contend that information asymmetries are bound in financial markets and that in an unregulated market, the possibility exists that unsuspecting investors will be harmed by those with access to information not available to the public at large.

## **2.4 Review of Empirical Studies**

Being one of the most important decisions in a firm's operating life, a public listing has always attracted much attention of researchers. Different studies have employed different

designs and tried to investigate the phenomenon and explain its motives and actual outcomes. However, in spite of the fact that there are numerous academic papers on the topic, only limited empirical evidence on what exactly determines the listing exists (Gvardina and Sahovska, 2013).

As stated earlier in this study, Brav, A., Brav, O. and Jiang, W. (2006) and Albornoz and Pope (2004) admit that it is difficult to empirically investigate the determinants of firms' decisions to go public due to data constraints. Ritter and Welch (2002) suggest that the difficulties in empirical tests of formal theories of listing activity arise from the fact that researchers can only study sets of publicly listed firms, as for those companies which were eligible to go public, but chose not to do so, there is a general lack of data. Nevertheless, this has not prevented some researchers from obtaining significant results and making reliable conclusions.

Albornoz and Pope (2004) analyzed 830 public firms that were listed on London Stock Exchange. They found that going public decision of companies was related: (a) positively to their size, stock market valuation of other companies within the same industry; and (b) negatively to their leverage levels and profitability. Based on the analysis of post-IPO evidences, the study suggested that 'financing needs' and 'reduction of leverage' were not the major factors influencing IPO decisions in the UK.

Boehmer and Ljungqvist (2004) examined 330 German firms that went public between 1984 and 1995. The result of the study was based on a hazard analysis of factors

influencing the timing of IPOs. The firms were observed from the date of IPO announcement to the date of their IPO. The following factors were found to be positively affecting the likelihood of IPO: sales, profit margins (relative to other firms in its industry) and stock market returns of the firms in the same industry, and uncertainty about the future profitability. To preserve the private benefits of control was found to be a major motivation behind staying private.

Brau and Fawcett (2006) conducted a managerial survey of 336 CFOs of the US firms which hitherto either (a) had successfully completed their IPO; or (b) had initiated their IPO process but later on chose to call off their IPO; or (c) were eligible to do an IPO but decided to remain private. Their survey sample of 336 CFOs was the result of a response rate of 18.1 percent. The survey revealed that: the acquisition purpose was a major factor that motivated the US companies to do IPO; issuers timed their IPOs to take advantage of prevailing market conditions; and preservation of decision-making control and ownership were the main reasons for remaining private.

Chemmanur, He and Nandy (2005) investigated the relationship between product market characteristics and probability of going public for a large sample of US firms. A probit model was used to examine the relationship between the product market characteristics of firms immediately before going public and its likelihood of going public. The following characteristics were found to be positively affecting the likelihood of going public: firms with larger size, sales growth, market share, and capital intensity; firms operating in less competitive and more capital-intensive industries; firms in industries characterized by

riskier cash flows; firms with projects that are cheaper for outsiders to evaluate; firms operating in industries characterized by less information asymmetry; and firms with greater average liquidity of already listed equity.

Mayur and Kumar (2007) carried out a study on Determinants of Going-Public Decision in an Emerging Market: Evidence from India. Their analysis implies that Indian firms go public to: (a) raise capital for their growth and expansion; (b) diversify the risk of initial owners and capital structure rebalancing; (c) bring down their cost of capital; (d) increase the liquidity of their shares; (e) avoid excessive monitoring of large/block shareholders; and (f) seek publicity. These Indian firms face following costs/deterrents in becoming public: (a) Information asymmetry and adverse selection costs; (b) Experience loss of confidentiality; and (c) Bear initial and subsequent expenses.

Another study on determinants of listing in stock market, which has been identified as the most reliable and cited paper on the topic is the one by Pagano, Panetta, and Zingales (1998). The study examined a sample of Italian companies with the results indicating that the likelihood of conducting an IPO increases with an increase in a company's size.

Another researcher, Clementi (2002) in his study on Initial Public Offers and the growth of firms, finds that operating performance or profitability of a firm, measured as Return on Assets, has a positive effect on the likelihood of a company issuing an IPO, as it peaks in the fiscal year prior to the event.

In a study by Fische (2000), comparing the balance sheet structure of privately held German firms and companies which went public on Neuer Markt, Europe's dominant stock market segment for growth firms, the determinants of initial public offerings (IPOs) of technology-based firms was analyzed. The findings were that the likelihood of an IPO is increasing in the proportion of intangible assets as well as R&D intensity. Leverage is only significant in year two before flotation and increases the probability of going public. Analysis of the companies that went public in other stock market segments on Frankfurt Stock Exchange shows that these IPO were realized at a time when the issuers were in sound economic and financial conditions.

In one of the most recent study, Gvardina and Sahovsca (2013) conducted a study on listing decision of firms in emerging markets. This study attempted to investigate the determinants of a firm's decisions to go public and cross-list in a foreign market. This paper showed that the relationships between a number of determinants and the listing decision are different for developed and emerging markets.

Osei (1998) carried out an Analysis of factors affecting the development of an emerging capital market: The case of the Ghana stock market (GSE). Analysis of the structure of the GSE showed among others that many of the local investors are low income investors, a sizeable percentage had no formal education and that the knowledge of local investors about the capital market was quite poor. The study indicated that foreign investors come from Europe, America, etc. With the exception of Nigeria, no foreign investors on the

GSE come from sub-Saharan Africa. The study recommended a campaign to educate the Ghanaian public about the activities of the GSE and to promote investment.

In a study done in Uganda, access to finance was found to be the major constraint faced by SMEs followed by corruption, infrastructure and taxation (Oteh, 2010). Bank financing is the predominant source of external financing for Ugandan SMEs. According to most available resources, their equity ratios, although spread across a wide range; do not exceed 20 percent on average.

In another study done in Uganda, by Kihika (2007), public awareness is one of the basic ingredients of a well-functioning capital market. The government through the CMA has tried to embark on a vigorous campaign with a view of informing the general public about the benefits accruing from participating in a capital market, including the GEMS. This knowledge to the public helps to build confidence in the public and promotes participation of investors in the market. Public information campaigns generate public awareness and disseminate growth of the market.

One of the studies in Kenya that investigated factors that influence listing of Kenyan SMEs at the Nairobi Stock Exchange revealed that access to information influence listing of SMEs in the NSE to greatest extent while the terms and conditions set by the capital market has the least influence listing of SMEs in the NSE (Mwarari, 2013). Corporate governance requirement was also said to influence listing according to this study.



In another Kenyan market study, Kihimbo, Ayako, Omoka and Otuya (2012) carried out a study on financing of small and medium enterprises in Kenya with a case of selected SMEs in Kakamega Municipality. The study revealed that despite the fact that formal financing was significant in success of the business, most of the SMEs rely on informal financing.

The other study carried out in Kenya by Aduda, Masila and Onsongo (2012) which focused on the Determinants of Stock Market Development: The case of the NSE, found that macroeconomic stability proxied by inflation and foreign private capital inflow has no effect on stock market development. It therefore recommended further research geared toward establishing if macroeconomic instability affects stock market development.

## **2.5 Summary of Literature Review**

Overall, it appears that listing incentives and determinants differ significantly across companies which belong to various markets and time periods. Consequently, this confirms that before listing in the market, companies must carry a thorough and time-consuming analysis weighting all the benefits and costs this may ensure for a specific company with its particular characteristics. Hence, investigation of the relationships between these characteristics and the decision to list in a securities exchange is of high importance.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter defines the design of the study and the research method, which was used to get responses from the target population. It further highlights data collection procedures including the instruments that were used for collecting the data. The chapter concludes with highlighting how data was analyzed.

#### **3.2 Research design**

The research design of this study was descriptive. The descriptive design method is suitable in this case because it addresses the major objectives and the research questions proposed in the study adequately. The study intended to come up with findings that showed the determinants of listing in GEMS at the NSE.

#### **3.3 Population and sampling**

The target population of this study was all the companies that have listed or decided to list at the Growth Enterprise Market Segment in the Nairobi Securities Exchange and an equal number of other similar companies that have not listed or made a decision to list in the market. Similarity of the companies was in terms of industry or sector and size. The category of non-listed companies that have not made decision to list were selected from the top 100 SMEs in Kenya. A sample of four companies was used in this study.

### **3.4 Data Collection**

For purposes of this research, secondary data was required. Secondary data was collected from internet, business journals and records of the companies.

### **3.5 Data Analysis**

The study used data covering five years period before listing. The data collected was edited for accuracy, uniformity, consistency and completeness and arranged to enable coding and tabulation before statistical analysis. The data was coded and cross tabulated to enable responses to be statistically analyzed. A regression model was used to assess the relationship between the decision by firms to list in the GEMS and the factors that have been selected as determinants of listing in the GEMS. The research used the Statistical Package for the Social Scientist (SPSS) to estimate the result of the correlation between the variables.

A logistic regression model was used in the analysis of data. Listing is modeled as a zero one phenomenon, i.e. the company has not decided to list in the GEMS (0) or it is has decided to list (1). We estimate a probability model where the dependent variable is the probability of listing. Among the independent variables, is ownership diffusion that was measured by the average shareholding proportion which is the total number of shares divided by the total number of shareholders for each individual firm. Ownership diffusion is one of the variables that can be used to measure a firm's governance mechanism.

(Alsaeed, 2006). The other independent variables are sales growth, profitability, leverage and liquidity, which shall be used as a measure of a firm's riskiness.

Therefore the empirical model that was used:

$$LIS = \beta_0 + \beta_1 ODI + \beta_2 SGR + \beta_3 PROF + \beta_4 LEV + \beta_5 LIQ + \varepsilon$$

Where:

LIS = the probability of the firm being listed in the Growth Enterprise Market Segment, which was measured by 1, if the firm had decided to list and 0 if the firm had not decided to list.

ODI= Ownership diffusion of the firm

SGR= Sales growth rate of a company

PROF=Profitability of the firm, which was measured using Return on Assets, which is the ration of earnings before interest and tax to total assets.

LEV= The leverage of the firm which was measured using the debt- equity ratios of the firm

LIQ= Liquidity of the firm, which was measured by ratio of current assets to current liabilities

$\beta_0, \beta_1, \dots, \beta_5$  = The regression coefficients and

$\varepsilon$ =Error term

The study sought to establish the relationship between the firm's profitability, firm's sales growth, firms' level of risk, firm's corporate governance (leverage) and company's capital structure preferences and listing in the GEMS at the NSE. The for the significance of the relationship between the dependent and independent variables was tested using omnibus test and the model explanatory power was measured using Nagerkele R square.

The Wald statistics was used to test the significance of the relationship between the dependent and respective independent variables.

### **3.6 Data Validity and Reliability**

Validity of data was ensured through thorough literature review to understand the area of study. Overall adoption of well-established research method was key in ensuring data validity and reliability in this study.

## **CHAPTER FOUR: DATA ANALYSIS, INTERPRETATION AND DISCUSSION**

### **4.1 Introduction**

The purpose of this study was to investigate the determinants of listing at the Growth Enterprise Market Segment in the Nairobi Securities Exchange in Kenya. The study was guided by return on assets, profitability, sales growth rate, leverage, shareholding diffusion and liquidity as the independent variables and the chances of listing in GEMS at the NSE. The current chapter presents study findings where descriptive statistics to show the trends of various variables were used and binary logistic regression analysis was applied to determine the odds of listing. In the current chapter, the changes in odds for listing are measured by the value of expected (Exp) B. The study employed -2log Likelihood (- 2LL) as a measure of the goodness of the logistic models while both Cox and Snell R square and Nagelkerke R square show the model explanatory power (Cox and Snell, 1989; Nagelkerke 1991). To check whether the logistic estimates are significant from zero, the study made use of Wald statistic.

### **4.2: Descriptive Statistics**

The study used descriptive statistics such as minimum, maximum, mean and standard deviation. The summary was organized as overall group descriptive statistics, firms that have made decision to list descriptive statistics, firms that have not decided to list descriptive statistics and comparative descriptive statistics among the four companies investigated and yearly comparative statistics.

#### 4.2.1: Overall Descriptive Statistics

Results of the study in Table 4.1 depicted that on average the overall return on assets was 9% with the minimum return on assets being -9% and maximum was 70%. A close scrutiny of the return on assets depicted that the deviation of return on assets averaged 16%. The overall average on leverage was 1.35 with a maximum average of 8.86. In regard to the liquidity level the firm had an average liquidity of 6.42 and the average annual sales growth rate averaged at 1.5%.

**Table 4.1: Overall Descriptive Statistics**

<b>Variables</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Deviation</b>
Return on assets	-0.09	0.70	0.09	0.16
Leverage	0.01	8.86	1.35	2.67
Liquidity	-102.26	128.06	6.42	40.66
Sales growth rate	-0.33	18.21	1.50	4.33

#### 4.2.2: Descriptive Statistics for Firms that had decided to List

Results in Table 4.2 shows that on average the return on assets for listed firms was 7%, leverage was 2.44, liquidity was 12.64 while annual sales growth rate was 27.8%. It was important to note that one of the firms that had decided to list had once a return on assets of -9% and annual sales growth rate of -3.3%.

**Table 4.2: Descriptive Statistics for Firms that had decided to List**

<b>Variables</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Deviation</b>
Return on assets	-0.09	0.70	0.07	0.23
Leverage	0.01	8.86	2.44	3.52
Liquidity	-102.26	128.06	12.64	58.35
Sales growth rate	-0.33	18.21	2.78	5.99

### 4.2.3: Descriptive Statistics for Firms that had not decided to Listed

Results in Table 4.3 shows that on average the return on assets for firms that had not decided to list was 10%, leverage was 0.27, liquidity was 0.2 while annual sales growth rate was 22%. It was important to note that the minimum return on assets was 1% with a maximum of 16%. Among the firms that had not decided to list, leverage and liquidity were less dispersed as compared to the firms that had decided to list.

**Table 4.3 Descriptive Statistics for firms that had not decided to List**

<b>Variables</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Deviation</b>
Return on assets	0.01	0.16	0.10	0.05
Leverage	0.02	0.42	0.27	0.14
Liquidity	0.11	0.48	0.20	0.11
Sales growth rate	0.12	0.28	0.22	0.05

### 4.2.4: Descriptive Statistics per Company

Results in Table 4.4 shows the comparative analysis among the four companies whose annual results were considered for the study. The findings show that in regard to return on assets company A had an average return on assets of 1%, B had 14%, C had 9% and D had 9%. On average company A had a leverage of 4.6, B had 0.28, C had 0.15 and D had 0.38. Further, in regard to Liquidity Company A had 25.22, B had 0.06, C had 0.18 and D had 0.23. On average company A had an annual sales growth rate of 5.39, B had 0.16, C had 0.21 and D had 0.22.



**Table 4.4 Descriptive Statistics per Company**

<b>Company</b>	<b>Variables</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Deviation</b>
A	Return on assets	-0.09	0.13	0.01	0.09
	Leverage	0.01	8.86	4.60	4.03
	Liquidity	-102.26	128.06	25.22	85.24
	Sales growth rate	-0.33	18.21	5.39	7.98
B	Return on assets	0.00	0.70	0.14	0.31
	Leverage	0.12	0.41	0.28	0.15
	Liquidity	0.00	0.18	0.06	0.08
	Sales growth rate	-0.19	0.45	0.16	0.25
C	Return on assets	0.01	0.15	0.09	0.07
	Leverage	0.02	0.26	0.15	0.09
	Liquidity	0.12	0.24	0.18	0.04
	Sales growth rate	0.12	0.28	0.21	0.07
D	Return on assets	0.06	0.16	0.11	0.04
	Leverage	0.27	0.42	0.38	0.06
	Liquidity	0.11	0.48	0.23	0.15
	Sales growth rate	0.17	0.26	0.22	0.04

#### **4.2.5: Descriptive Statistics on Annual Basis**

Results in Table 4.19 shows that on average the return on assets was 17.6% in 2009, 4.9% in 2010, 3.6% in 2011 and 10.4% in 2013. This shows that the return on assets was characterized by a down ward trend in the initial years which posted an upward trend in the year 2013. On leverage among the firms all the firms employed more debt in their capital structure as period changed between 2009 and 2013. Further, the annual liquidity among the firms depicted an upward trend from 2009 to 2013. Finally, the annual sales growth rate showed an upward trend since 2009 to 2013 with only year 2012 where there was an annual decline.

**Table 4.5: Descriptive Statistics on Annual Basis**

<b>Year</b>	<b>Variables</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Deviation</b>
2009	Return on assets	-0.080	0.704	0.176	0.357
	Leverage	0.011	0.409	0.178	0.195
	Liquidity	-0.140	0.181	0.068	0.142
	Sales growth rate	0.000	0.338	0.155	0.141
2010	Return on assets	0.000	0.161	0.049	0.075
	Leverage	0.161	0.911	0.457	0.319
	Liquidity	0.000	37.170	9.369	18.534
	Sales growth rate	0.069	18.208	4.680	9.019
2011	Return on assets	-0.087	0.125	0.036	0.098
	Leverage	0.155	8.856	2.450	4.272
	Liquidity	-102.260	0.167	-25.481	51.186
	Sales growth rate	0.211	8.204	2.268	3.959
2012	Return on assets	0.003	0.126	0.071	0.059
	Leverage	0.121	5.176	1.495	2.457
	Liquidity	0.027	128.060	32.129	63.954
	Sales growth rate	-0.328	0.282	-0.012	0.292
2013	Return on assets	0.009	0.152	0.104	0.064
	Leverage	0.117	8.028	2.182	3.900
	Liquidity	0.080	63.260	16.014	31.498
	Sales growth rate	0.157	0.861	0.389	0.319

### 4.3 Binary Logistic Regression Model

A binary logistic regression analysis was carried out to investigate the determinants of listing at GEMS in the NSE. Omnibus test was used as a test of the full model against the constant only model, the model was statistically significant indicating that the determinants of listing were differentiated between the quoted and unquoted firms in GEMS (Chi square= 16.152, P value <0.05 with d.f= 4). On overall prediction success was 70%.

**Table 4.6: Omnibus Test for Model Goodness Fit**

	<b>Chi-square</b>	<b>df</b>	<b>Sig.</b>
Step	16.152	4	0.00
Block	16.152	4	0.00
Model	16.152	4	0.00

The -2 log likelihood measures the model goodness of fit the further it is from zero the poorer the model in the current study it was 21.574. The model explanatory power can be explained by either Cox and Snell R square (0.265) or Nagelkerke R square (0.353). In the current study return on assets, liquidity, leverage and sales growth had an explanatory power of 35.5%. This implies that the probability of a firm being listed in GEMS is determined up to 35.3% by the four independent variables while the remaining percentage can be explained by other factors not included in the model.

**Table 4.7: Model Summary**

<b>-2 Log likelihood</b>	<b>Cox &amp; Snell R Square</b>	<b>Nagelkerke R Square</b>
21.574	0.265	0.353

#### 4.4 Summary and Interpretation of Findings

**Table 4.8: Regression Coefficients**

<b>Variables in the Equation</b>	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
Return on Assets	-0.123	3.036	0.002	1	0.004	0.885
Leverage	0.615	0.96	0.41	1	0.005	1.849
Liquidity	0.019	0.061	0.094	1	0.000	1.019
Sales	0.205	0.476	0.184	1	0.004	1.227
Constant	-0.687	0.654	1.106	1	0.293	0.503

The Wald criterion demonstrated that return on assets made an insignificant negative contribution to prediction of chances of a firm being listed in GEMS ( $\beta = -0.123$ , Wald =

0.002 and p-value <0.05). B column indicates the magnitude and direction of the given independent variable in relation to prediction of being listed. The coefficient gives us the change in proportion of prediction of being listed in GEMS given a unit change in any of the independent variables. It can be concluded that a unit change in return on assets decreased the likelihood of a firm being listed in GEMS by 0.123. Exp (B) value indicated that when return on assets is raised by one unit, the odds ratio is 0.885 times as large and therefore a firm with an increase in assets decreased their listing chances by 0.115 (11.5%). A study in UK by Albonoze and Pope (2002) also show a negative effect of profitability on probability of listing. However, a similar study in Germany by Clementi (2002) indicates that profitability has a positive effect on the probability of a firm listing.

Secondly, in regard to the leverage, the study findings depicted that there is a positive significant relationship between leverage and the chances of listing in the NSEs GEMS. ( $\beta = 0.615$ , Wald = 0.41 and p-value <0.05). This implies that a unit change in leverage is associated with 0.615 chance of listing. Further, the study showed that a unit increase in the leverage is associated with 1.849 odds as large. Therefore a firm's increase in leverage increased the odds for listing by 0.849 (84.9%). Helwege and Liang (2002) in their research on riskiness as a determinant of going public proxied by leverage found a strong positive relationship between the level of leverage and the decision to list. However, Albornoz and Pope (2004) find a contradictory negative effect of leverage on the probability of listing in a study of firms listing in the UK.

Further, the Wald criterion depicted that there was a positive significant relationship between liquidity and the chances of a firm listing in GEMS ( $\beta= 0.019$ , Wald = 0.061 and p-value <0.05). Exp (B) value indicated that when liquidity is raised by one unit the odd ratio is 1.019 times as large and therefore the liquidity increases the odds for listing by 0.019 (1.9%) times as large. Albornoz and Pope (2004) in their study in UK suggest that increased visibility and liquidity incentives are more important for companies that decide to list on stock exchange.

Finally, the Wald criterion depicted that there was a positive significant relationship between sales growth rate and the chances of a firm listing in GEMS ( $\beta= 0.205$ , Wald = 0.476 and p-value <0.05). Exp (B) value indicated that when sales is raised by one unit the odd ratio is 1.227 times as large and therefore the sales increases the odds for listing by 0.227 (22.7%) times as large. Sales growth is found to significantly positively influence a firm's probability of listing by Fischer (2000), who researched German technology-based firms.

## **CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Summary**

The study findings were summarized using the measures of central tendency such as mean and measures of dispersion such as standard deviation. A binary logistic regression was carried out to investigate the relationship between the probability of being listed and its influencing factors. The Omnibus test for the significance of the model showed that the determinants of listing were differentiated between the firms that had made a decision to list and those that had not decided to list (Chi square= 16.152, P value <0.05 with d.f= 4). The overall predicting power of the model was 35.3% as indicated by Nagelkerke R square.

The findings showed that there is a significant negative relationship between return on assets and the probability of being listed ( $\beta = -0.123$ , Wald = 0.002 and p-value <0.05). The odds for being listed were 0.885, implying that an increase in assets decreased the chance of being listed by 11.5%. In addition, the study findings showed that there is a positive significant between leverage and chance of being listed ( $\beta = 0.615$ , Wald = 0.41 and p-value <0.05). The odd ratio of being listed were 1.849. This implies that leverage increases the chances of being listed by 84.9%. Thirdly, the study findings showed that there is a positive significant relationship between liquidity and the chances of being listed ( $\beta = 0.019$ , Wald = 0.061 and p-value <0.05). The odds for being listed were 1.019, implying that liquidity increases the chances of being listed by 1.9%. No relationship was established between shareholding diffusion and listing at GEMS in the NSE.

## **5.2 Conclusion**

The objective of the study was to establish the relationship between the selected factors and listing at Growth Enterprise Market Segment in the Nairobi Securities Exchange. Secondary data was collected for a period of five years among firms that had made decision to list and those that had not decided to list in the segment. Secondary data was obtained for a period of five years from the firms that were considered in the study. Since the study used the exploratory design, binary logistic regression analysis was applied to determine the odds of being listed in NSE.

In overall, the analysis have depicted that the chances of a firm to be quoted is influenced by return on assets, liquidity, leverage and sales annual growth rate. Although the predicting power of the model was significant the combined independent variables only explained 35.3% while the remaining percentage can be explained by other factors not included in the model. Therefore, the excluded factors should be investigated so as to ascertain the nature of their relationship with the chances of being listed. Moreover, return on assets depicted a negative relationship with the chances of being listed.

There is need for ascertainment of the relationship between firm size and the chance of being listed as measured by the natural logarithm of the total assets. Geographical locality and the nature of the business conducted by the firms should be investigated so as to ascertain its influence on the chances of being listed in GEMS. There are various ratios which are used to explain the firm's performance and a similar relationship ought to be investigated to determine the chances of a firm being listed at GEMS in NSE.

### **5.3 Policy Recommendation**

From the study, it was found that sales growth rate of the firm positively influence firm listing in the GEMS. It is therefore recommended that the Kenyan Government, in addition to developing a securities exchange market that is accessible for equity financing by SMEs, should strengthen policies on training of SMEs to enhance their sales growth. It is not sufficient to know how to produce a high quality product. The producer must also know how to sell it effectively and in doing that the entrepreneur must be skilled in business.

This study further recommends that the Government of Kenya and other stakeholder should, in their efforts to promote accessibility to finances for SMEs among other sector development measures; assist in marketing of SMEs and their products. This can be done for instance through organizing trade fares and enhancing policies that help the SMEs export their products so as to widen their market.

Lastly, Pre-issue/ listing technical assistance by relevant authorities should be considered to ensure that potential companies are not limited due to lack of corporate finance expertise in their management. Also CMA and other stakeholders should provide information to the firms about the benefits of the GEMS so that they can list and enjoy benefits that cannot be overemphasized. Some firms could be in high score probability to list, but have no information to help them list at the market.



#### **5.4 Limitations of the Study**

The study involved use of secondary data obtained from the financial statements of companies under study. Due to the sensitivity of this information, most firms had reservations to give access to their financial statements. This problem was addressed by detailed explanation of the nature of the study being conducted and convincing that the data was purely for academic purposes and that confidentiality would be ensured. Nevertheless, this led to delay in data collection and in some cases no data was availed. A recommendation to overcome this in future is that sufficient time should be allocated for similar data collection.

The study was also limited to the degree of precision of the data obtained from the secondary source. While the data was verifiable since it came from the firm's financial publications and audited accounts, it nonetheless could still be prone to these shortcomings.

Also, the researcher could only access data through hard copies and the soft version of the reports could not be shared. This increased the researcher's work through entering data into the computer before computation and analysis.

Lastly, the study was based on a five year study period. A longer duration for the study would have captured periods of various economic significances such as booms and recessions. This may have probably given a longer time focus hence given a broader dimension to the problem. Future studies of similar nature should consider using information covering a longer period to capture a broader dimension to the problem under study.

## **5.5 Suggestions for Further Studies**

This study sought to investigate determinants of listing at the GEMS in the NSE. To ensure right measures are taken towards the development of this new market segment that is geared towards assisting SMEs raise equity financing, there is need for a study to be conducted on the challenges facing firms while listing and while trading at this market segment.

There is also a recommendation that since this study sort to establish the relationship between the probability of a firm listing at the GEMS and selected variables that included a firms, sales growth, profitability, liquidity, leverage and shareholder diffusion; further research to establish the relationship between other factors and listing at the market should be carried out.

After a company conducts an Initial Public Offering, it may consider subsequent equity offerings abroad. The benefits companies get from foreign listing sometimes are not obvious; however, there is quite a broad set of literature that discusses the topic and sheds light on the motives for cross-listing hence the a study on the determinants of cross-listing in Kenya is recommended in this paper.

Last, but not least, this study was done at a time when the Growth Enterprise Market Segment at the NSE was relatively new and only a few firms had come out to list at the Market, further research, incorporating a larger population sample to investigate determinants of listing in the GEMS at the NSE is recommended in the future.

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## APPENDICES

### Appendix I: Summary of Data

#### FIRMS THAT HAVE MADE A DECISION TO LIST IN GEMS

Company	A				
Year	2009	2010	2011	2012	2013
ROA	-0.07968	0.024503	-0.0866	0.040419	0.12690
Debt Equity ratio	0.01082	0.91087	8.85612	5.17622	8.0283
Liquidity	-0.14	37.17	-102.26	128.06	63.26
ownership diffusion	5000000	5,000,000	5,000,000	5,000,000	5,000,000
Sale Growth	0	18.2075	8.20432	-0.3283	0.86099

Company	B				
Year	2009	2010	2011	2012	2013
ROA	0.074	0.000	0.001	0.003	0.009
Debt Equity ratio	0.409	0.378	0.375	0.121	0.117
Liquidity	0.181	0.000	0.004	0.027	0.080
ownership diffusion	1431841.154	1,431,841	1,431,841	1,431,841	1,431,841
Sale Growth	0.338	0.069	0.447	-0.187	0.157

#### FIRM THAT HAVE NOT DECIDED TO LIST IN GEMS

Company	C				
Year	2009	2010	2011	2012	2013
ROA	0.0180	0.0103	0.1246	0.1260	0.1520
Debt Equity ratio	0.0216	0.1611	0.1546	0.2612	0.1653
Liquidity	0.1218	0.1513	.1673	0.2028	0.2351
ownership diffusion	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
Sale Growth	0.1150	0.1821	0.2116	0.2817	0.2796



<b>Company</b>	<b>D</b>				
<b>Year</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
ROA	0.061	0.161	0.104	0.113	0.129
Debt Equity ratio	0.271	0.378	0.415	0.421	0.417
Liquidity	0.110	0.156	0.164	0.227	0.480
ownership diffusion	60,000,000	60,000,000	60,000,000	60,000,000	60,000,000
Sale Growth	0.167	0.261	0.211	0.187	0.257