

**THE EFFECT OF THE INTRODUCTION OF THE GROWTH
ENTERPRISE MARKET SEGMENT ON THE STOCK MARKET
PERFORMANCE AT NAIROBI SECURITIES EXCHANGE**

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DECLARATION

This research project is my original work and has not been presented to any other institution or university.

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This research project has been submitted for examination with my approval as the university supervisor.

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DEDICATION

I would like to dedicate this Project to my beloved husband Victor Sabila, Parents Mr. & Mrs. Kigen and my siblings Hillary Kiprotich, Gideon Kiplagat, Lily Jepchirchir and Raphael Kibet for both their financial and moral support during entire period of the project.

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ABBREVIATIONS & ACROYNMS

| | |
|--------------|--|
| ACCA | Association of Chartered Certified Accountants |
| AIMS | Alternative Investment Market Segment |
| CMA | Capital Market Authority |
| EMH | Efficient Market Hypothesis |
| FISMS | Financial Income Securities Market Segment |
| GEMS | Growth Enterprise Market Segment |
| IPO | Initial Public Offer |
| LSE | London Stock Exchange |
| MIMS | Main Investments Markets Segments |
| NSE | Nairobi Securities Exchange |
| ROE | Return on Equity |
| SME | Small and Medium Enterprise |

ABSTRACT

GEMS set the passage obstructions much lower than Main Investments Markets Segments (MIMS) and Alternatives Investments Market Segments (AIMS). The fragment was required to profit SMEs through an expanded profile and liquidity inside an administrative situation composed particularly to address their issues. The section would empower firms raise long haul capital in this way growing existing tasks in the meantime get back for the new activities. However, there is no information on the influence the segment has on the stock market operations. This study sought to investigate the effect of the introduction of GEMs on stock market performance at NSE. This was done by studying the effect of the segment on the stock value and returns as well as the number of firms under GEM segment. To achieve the objective of the study, the study used event study approach and collected secondary data on the performance of the firms listed in NSE before and after the introduction of the GEM segment. To accomplish the goal of the study, the study utilized occasion think about approach and gathered optional information on the execution of the organizations recorded in NSE prior and then afterward the presentation of the GEM fragment. The study utilized occasion think about procedure to set up the distinctions prior and then afterward and the impact of the GEM portion on money markets esteem. The study found that GEM fragment positively affected the profits of the stock. The beta or the flexibility of the section on the NSE 20 record firms was certain demonstrating any incremental changes on the portion impacted the NSE returns emphatically.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

The introduction of the Growth Enterprises Market Segments (GEMS) on the Nairobi Securities Exchange (NSE) was well timed since the small scale investments play a major role in prosperity of economy and job creation. This new segment, namely the Growth Enterprise Market Segments is meant to encourage raising long haul capital for (SMEs) in our Country. NSE comprehends that SMEs are viewed as the key players for riches creation; consequently relying upon their development introduction they have the capability of making generous commitment towards genuine financial development. NSE noticed that an all-around sustained SMEs will positively affect the nation's financial advancement activities considering their exercises are both comprehensive and have a more extensive effort in making the multiplier impact in the economy. Notwithstanding, the significant imperatives confronting SMEs is availability to fund. Subsequently, an activity to give capital financing answer for SMEs is of most extreme significance (NSE, 2016).

Pecking order theory (Myers & Majluf, 1984) posits that cost of financing increments with lopsided data. Financing originates from three sources, new value, inward subsidizes and obligation and new value. Organizations organize their wellsprings of financing, first leaning toward inner financing, also obligation, thirdly value which is typically the "final resort". Accordingly, internal financing is used in the first place, then commitment is issued; and when it is not any more attracted out sensible to issue any more commitment,

esteem is issued as the last option. Small medium enterprises will expand their projects and new business using the internal funds and when they are depleted they will result to debt. Debt will be obtain from various financing institution and these institutions will give credit limits to SMEs, when SMEs exhausts its credit limit they can no longer obtain financing through debt thus they resort to equity financing. The SMEs will obtain equity financing through issue of shares, NSE has provided a platform for SMEs to issue shares through listing under the Growth enterprise market segments (GEMS).

The NSE has informed entrepreneurs on this window of opportunity and hence looking forward to having a closer working relationship with the widespread SMEs in the country thus able to share with these entities on the financing opportunities available at the NSE's GEMS. This will address the constraint of long-term financing thus ensuring that SME's have the availability of capital to start or expand their projects (NSE 2016).

1.1.1 Growth Enterprise Market Segments

Growth Enterprise Market Segments (GEMS) is a market segment that was set up by Nairobi Securities Exchange for growth of small and medium sized firms to raise continuous and starting significant capital. The SMEs will likewise profit by expanded profile and liquidity inside an administrative domain outlined particularly to address their issues. The share trading system assumes a noteworthy part in different financial organizations along these lines upgrading the proficiency in capital development and distribution. It also enables firms raise long term capital thus expanding existing projects at the same time obtain finance for the new projects (ACCA, 2013).

GEMS set the entry barriers much lower than Main Investments Markets Segments (MIMS) & (AIMS). The least qualification conditions and posting necessities for this segment include but not limited to the fact that the company must have a base approved, issued and completely paid up share capital of Kshs 10 million of no less than 100,000 partakes in issue. All shares issued should be immobilized and they should have been in business for one year with skilled board and senior administration with no less than 1 year encounter. There no need of profitability record although it operate on a strong disclosure regime where the listed firms are to provide frequent, timely and detailed information for investors use. Once listed, they are required to disclose half year business performance against the budget for the first two financial years. They are also required to publish quarterly, half yearly and annual accounts (NSE, 2016).

GEMS will enable SMEs obtain long term financing through equity issuance and this will contribute immensely to economic progress as SMEs relates to poverty reduction and job creation. Unemployment remains a major challenge in the world economies. Large businesses do contribute towards the alleviation of this problem but the contributions being made by the Small and Medium Enterprises (SMEs) are immense (Neumark et al., 2008). The input of Small and Medium Enterprises (SMEs) to an economy can also be viewed from the point that all clients would lean toward items that are all the more, instead of less, customized which makes innate weights towards making markets littler and littler i.e. more customized to the requests of individual shoppers. The managerial costs of satisfying the demands of small markets are high as compared to big and

generalized markets. SMEs serve an economy by gratifying the demands of small markets for which there are no or lower scale economies of production or distribution.

SMEs also serve an economy by fulfilling requests where the administrative expenses of vast business are more prominent than the market exchange expenses of managing by contract as opposed to by control inside a firm. The lower the market exchange costs, the bigger the extent of SMEs, higher the market transaction costs, the smaller the scope of SMEs and this influence the specialized demands of small markets. The bring down the market exchange costs, the bigger the extent of SMEs and the more that the particular requests of little markets will be fulfilled (Priest, 2003). The foundation and improvement of SMEs are indispensable fixings in making dynamic market economies in the monetary and social advancement of move and creating nations. Entrepreneurship should be encouraged as it significantly drives monetary development, advancement, provincial improvement and employment creation. Fortifying Small and Medium Enterprise division serves as a solid establishment to expand ways of life and to decrease neediness (OECD, 2004).

GEMS give small and medium sized enterprises the perfect opportunity to raise funds through listing. Even though GEMS operate on a buyers beware policy, it ensures that investors' funds are not put on risk by requiring companies seeking listing subscribe to strict corporate governance in order to be allowed on the securities 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. GEMS have currently 5 companies listed under it; Home Afrika, Flame Tree Group, Kurwitu Ventures, Atlas Development and support services limited and Nairobi Business Ventures. When GEMS was introduced in the year 2013 they had a target of three to four new listing on GEMS each year thus culminating to 16 listings by end of 2016. The listings currently is 31% of the target thus the slow listings of GEMS is an area of concern that needs to be investigated.

1.1.2 Market Performance

A company's monetary execution, in shareholder's view is the way happier the shareholder is toward the end of a given period than when he was toward the start. The financial performance of a firm is calculated using ratios obtained from the financial statements; income statement, balance sheet, or utilizing information on securities exchange costs (Berger, 2002). These proportions give the overall financial performance of a firm which can be analyzed to show whether the firm is accomplishing the proprietors' targets, they can likewise be utilized to contrast a company's proportions and different firms or for trend analysis over time. Severin (2002) states that a detailed financial analysis ought to give shareholders an overview of the firm's performance thus equipping them with information that they could use while making investments decisions.

The main objective of shareholders is to maximize their wealth in any business venture. Thus the performance measure of a firm shows how the shareholders are better off over a given period of time. The use of the funds of the owner in delivering the general benefit of the firm is calculated as benefits of the organization over shareholder capital utilized.

Return on Equity (ROE) = $\frac{\text{Net Profit after Tax}}{\text{Equity}}$, where value is the shareholders' assets toward the end of a similar period. When using ROE as a measure of performance it is good to exercise caution since the distinctions in bookkeeping practices may bend comes about. For example, some firm's expense expenditure on research and development while others capitalize it as an asset and expense it for over one year, the profit connected will contrast between the two firms. Other measures of performance include the profit rate which measures the money come back to the shareholder from his interest in the share firm and the book estimation of the organization contrasted with its reasonable worth along these lines measuring the adjustment in shareholders' estimation of venture. (Waithaka, 2014).

1.1.3 Growth Enterprise Market Segments and Market Performance

Fama (1991) postulate that it is difficult to beat the market since costs as of now joins and mirror all the applicable data. Efficient Market Hypothesis clarifies conduct of a flawless market in which the securities are regularly in harmony, securities costs completely mirror all people in general data accessible and respond quickly to new data; since stocks are completely and decently estimated, financial specialists require not squander time searching for mispriced securities i.e the share prices of the firms listed under GEMS incorporates all the relevant information. Stock market index movement is used to obtain the performance of the stock market and a proof of the economic activities in the country. Broby (2007) asserts that when the stock market record moves downwards the market is alluded to as bearish and when the list moves upwards on a persistent premise the market is alluded to as bullish. According to Berger & Patti (2002), rarely will the markets move

inside an exceptionally contract extend along these lines neither bullish nor bearish. The share trading system reflects the market performance through the direction of share price movement.

Market execution is gauged by money markets index which indicated direction of share price movement (Hsu, 2006). It measures quickly the overall direction of the market and is considered to be an accurate indicator of changes in the stocks. This implies that a stock market index ought to be neither understated nor overstated, the market position should not only be precise, but also exact. The market index entails all listed companies which represent a significant portion of market capitalization and trade actively. The NSE All share index represents all the companies while NSE 20 share index tend to be biased towards a large cap counters and thus fails to transmit the right signals on the entire market performance (Hsu, 2006). The performance of the stock is an indicator of the shareholders wealth. Good performance of the stock indicates maximization of the shareholders wealth. On the hand, poorly performing stocks indicates a decrease in shareholders wealth.

1.1.4 Nairobi Securities Exchange

NSE was constituted in 1954 as a willful relationship of stockbrokers enrolled under the Societies Act. Managing in shares and stocks began in Kenya in the 1920s, around then, Kenya was a British province in this manner stock broking was directed exclusively by Europeans in ranges of specialization, for example, bookkeepers, salespeople, home operators and legal counselors who met to trade costs over some espresso. Exchanging

occurred on respectable man's concurrence with no physical exchanging floor. In 1953(LSE) authorities acknowledged to perceive the setting up of the Nairobi Stock Exchange as an abroad stock trade. By 1966, the NSE had started measuring day by day exchanging movement by figuring the NSE Index. The file measured every day normal value change in 17 organizations that were viewed as the most dynamic stocks in the market (NSE 2016).

In 2001, NSE was part into the Main Investment Market Segment, Alternate Investment Market Segment and the Fixed Income Securities Market Segment while in 2013 the Growth Enterprises Market Segment was launched thus giving SMEs an extensive opportunity to access the capital markets. In 2014, NSE got endorsement from the CMA to work as a demutualised substance and offer its shares to the public. NSE became the first exchange in East and Central Africa to be publicly listed. The NSE is licensed and regulated by the CMA thus mandated to admit a firm to listing, suspension and delisting of shares of firms that are not compliant. They also ensure protection of rights of the investors and protection of investors against abuse of confidential information, misleading information, deceit and other adverse practises in the issuing and trading of securities (NSE, 2016).

GEMS was launched in 2013 and so far there are 5 listed companies under GEMS; Home Afrika Limited was the first company to be listed with 405M shares on 15th July 2013, according to the company's prospectus, the company is into real estate whose developments include: , Llango in Kwale County, Morningside Office Park in Nairobi,

Migaa, a live in golf community in Kiambu County, Lakeview Heights in Kisumu County and Kikwetu in Machakos County. Flame Tree Group was listed on November 6, 2014 and they deal with plastics, food snacks, cosmetics and trading, with a brand portfolio that includes Rino Tanques, Jojo Plastics, Roto tanks, Zoe, Cerro, Alana, Siora, Happy's and Buildmart. Kurwitu Ventures was listed in November 13, 2014 and its strategic focus is to become a vehicle for Sharia Compliant Investments. Atlas Development & Support Services was listed in December 17, 2014 and has three core divisions; Atlas Technical, Atlas Services and Atlas Logistics. Nairobi Business Ventures (NBV), was listed in June 21, 2016 and its vision is to manufacturing quality leather accessories locally thus changing the current tide. The local Shoe and leather accessories retail chain operates under the brand name KShoe. Nairobi business venture was the last to be listed at 23.6 million shares at a share price of Sh5, giving the company a valuation of Sh118 million shillings.

Financial development is advanced through enhanced effectiveness in preparation of investment funds as capital which is the main resource is designated to speculations that convey the most esteem to the economy capital's (Kibuthu, 2005). GEMS was launched by NSE to enable SMEs raise ongoing and initial substantial capital while profiting from expanded profile and liquidity inside an administrative domain composed particularly to address their issues. Investors will have confidence when investing under GEMS because they know they are protected by NSE while the listed SMEs are assured of long term financing through equity.

1.2 The Research Problem

In recognition of the contribution that the financial sector make towards achieving vision 2030, the Government of Kenya adopted the Capital Market Master Plan anchored by three pillars: develop the infrastructure of financial markets, support developmental and economic transformation, and reform the legal and regulatory environment in Kenya. Under the second pillar, the Master Plan had set a target for developing the Growth Emerging Market Segment on the NSE (Miller, 2015).

When the NSE launched GEMS in January 2013, the reception from policy makers and analysts in Kenya and beyond were enthusiastic. It was expected that through GEMS, SMEs will be able to raise ongoing and initial substantial capital, and at the same time benefit from expanded profile and liquidity inside an administrative domain. This development was expected to increase different activities by both the private segment and the legislature to manage the difficulties confronting SMEs. Home Afrika Ltd listed in the segment as the first company on 15, July 2013 after its launch, its aim being to raise capital for expansion. However, no other player listed at the GEMS during its first year although eighteen nominated advisors had been appointed by the NSE. The other firms listed are; Flame Tree Group listed on November 6, 2014, Kurwitu Ventures listed in November 13, 2014, Atlas Development & Support Services listed in December 17, 2014 and Nairobi Business Venture listed on June 21, 2016. The expectation by the NSE was that 16 SMEs would complete its listing under GEMS in 4 years' time (Miller 2015). The slow listing at the NSE's GEMS is an issue that is of concern that needs to be investigated.

Walker, Boyd and Larreche (1996) argue that segmentation has become increasingly important in the development of marketing strategies. Segmentation enables firm obtain better understanding of its customers, this makes it easier to recognize and combat competition. According to Kamau (2011), market segmentation is the way forward for success and stake holders will be assured of maximization of their share value. The NSE came up with policies that are applicable to different segment and one of the attractive requirements for SMEs is that no profitability record is required unlike MIMS, FISMS and AIMS. In the first two years they are required to submit the half yearly accounts against the budget, this gives close supervision to GEMS thus ensuring the shareholders wealth is maximized. Miller (2015) notes that an appropriate segmentation is crucial to SMEs business strategy because all choices about staffing, credit process, delivery channels, products and other aspects of strategy in SMEs will be based on segmentation. Market segmentation is a way forward for success of SMEs segmentation under GEMS thus obtaining capital for SMEs as its initial objective during formation.

The global researches that have been done in relation to GEMS include the following: Caccavaio, Carmassi and Spallone (2012) researched on why Italian SMEs seldom depend on value as an outside wellspring of fund. They analyzed a sample of listed firms through the questionnaire and they found out that policy interventions are key in providing Italian SMEs with appropriate incentives for listings. Afrifa & Venancio (2013) investigated the effect of working capital management on the execution of AIM recorded SMEs. Their study concentrated on relapse examination of the information of 133 SMEs over a three year time span (2007-2009). The general results did imply that although

working capital management influence the execution of SMEs, it was generally more vital to the administration of SMEs with limited resources.

In Kenya, there is no empirical research explicitly addressing the effects of the GEMS listings on the stock market performance at NSE. Several studies have been made by various scholars ranging from studies on the stock market development to studies on determinants of listing GEMS at NSE in Kenya. In their study, (Aduda, 2012) focused on the Determinants of Stock Market Development at NSE. According to their study, the securities exchange advancements was dictated by stock exchange wage per capita, local reserve funds, liquidity, institutional quality and bank improvement. Further, their discoveries discovered that macroeconomic dependability was proxied by expansion and remote capital inflow does not influence securities exchange improvement. Phanice (2014) carried out an analysis on the determinants of listings GEMS at NSE. The study researched on the impacts of various factors on a company's choice to list at the GEMS at the NSE. From her study findings depicted that the chances of a firm to be quoted is influenced by return on assets, liquidity, leverage and sales annual growth rate. Since the model had an explanatory power of 35.3% she suggested that future studies should be done to investigate on other factors such as size of firm and their influence on listing at GEMS in the NSE.

The above studies have focused on development and listing issues at the NSE. No study was found to have specifically investigated on the effects of the GEMS listings on the stock market performance at NSE. The objective of research was addressing following

question: The effect of the introduction of GEMs on the stock market performance at Nairobi Securities Exchange?

1.3 Research Objective

Objective was establishing effects of introduction of Growth Enterprise Market Segment on the stock market performance at Nairobi Securities Exchange.

1.4 Value of the study

Research gives critical information to various stakeholders in the corporate and policy makers in the world. It shall draw attention on areas that may need to be focused on by key players so as to serve the SMEs sector players efficiently. This will enable SMEs take up financing opportunities for business growth. This study will also make the public and all investors welcome the part of CMA and NSE play as a device for business development and growth. The study will also help the management of both the NSE and CMA to acknowledge the impact of SMEs on the financial markets and the need to develop appropriate policy initiatives to attract them to the market

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 GEMS, Emerging Capital markets and SMEs.

Finally, the study will also help the Government and various policy advisors in identifying the impact and weakness in the current options available to SMEs' equity funding and in the process introduce improvement measures.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Part shows all reviews of past research and it has the theoretical and conceptual framework.

2.2 Theoretical Review

Capital Market improvement is a critical segment of budgetary division advancement and supplements the part of the keeping money frameworks in monetary advancement. Capital markets helps with liquidity arrangement, decrease in exchanges costs, value disclosure and hazard exchange which influence the company choice of capital structure. Capital structure alludes to the mix of value and obligation utilized by firms as a part of financing their advantages. It also alludes to the extent of obligation instruments and favored basic stock on an organization's asset report (Van Horne, 1989). The theory underlying this study was the one that explains the financial structure of SMEs consequently explaining the participation of the SMEs in the stock market as GEMS. The study was guided by the following theories; Agency Theory, Efficient Market Hypothesis Theory, Behavioural Finance Theory and Market segmentation Theory.

2.2.1 Agency Cost Theory

It originated in 1970s and the scholars involved include; William Meckling, Harold Demsetz, Armen Alchian, S.A. Ross. Jensen and Michael Jensen (1976) states that

agency cost focusses on costs that are created when there is irreconcilable situations between supervisors, shareholders and obligation holders. Little firms are probably going to have concentrated proprietorship with define goals. Listing of small firms under GEMS at the stock market open doors to loss of control by the original owners and the new takeovers will have to engage operators to play out some work for their sake. Thus, the detachment of possession and control will bring about choices by the specialist which are not generally in the essential's best advantage. The agency costs include the cost to oversee the managerial activities such as review costs, expenses to structure organization in a way that will confine undesirable administrative and opportunity costs that are brought about when shareholders impose restrictions. Agency costs are unavoidable by small firms if they decide to expand their operations through equity i.e. being listed under GEMS.

2.2.2 Efficient Market Hypothesis

Eugene Fama (1991), sets that it is difficult to beat the market since costs officially consolidate and mirror all important data. This is likewise an exceptionally questionable and frequently debated hypothesis. Supporters of this model trust it is pointless to hunt down underestimated stocks or attempt to use fundamental and technical analysis to predict trends in the market. The different types of the effective market speculation vary as far as the data that security costs have a tendency to reflect, i.e. Solid frame EMH, Semi-solid shape EMH and Weak-shape EMH.

EMH is a fundamental hypothesis sketching out the conduct of an impeccable market in which the securities are ordinarily in harmony, securities costs completely mirror all people in general data accessible and respond rapidly to new data; since stocks are completely and reasonably estimated, speculators require not squander time searching for mispriced securities i.e. the shares prices of firms listed under GEMS incorporates all the pertinent data.

Under the proficient market theory, at whatever time you purchase and offer securities, you're taking part in a session of possibility, not aptitude. On the off chance that business sectors are effective and current, it implies that costs dependably mirror all data, so its absolutely impossible one will buy a stock at a bargain price. In this regard firms under GEMS were listed with the assumption that the market is efficient thus the share prices of Home Afrika, Flame Tree Group, Kurwitu Ventures, Atlas Support and development and Nairobi Business Ventures incorporates and reflect all the relevant information.

2.2.3 Behavioural Finance

Its the investigation of the impact of brain research on the conduct of monetary specialists and the ensuing impact on business sectors. Behavioral fund is of premium since it clarifies why and how markets may be wasteful (Sewell, 2001).While studying the GEMS we could look at ambiguity aversion under Heuristic driven biases, this is where people have preference for known risks over unknown risks. They are dreadful of uncertain circumstances where they feel they have little data about the conceivable

results. Financial specialists are careful about stocks that they feel they don't get it and they will give preference to the ones they are familiar.

The slow listings of firms under GEMS could be attributed to little information among the entrepreneurs' of SME thus making them comfortable to finance their businesses with debts and not equity since they don't understand the importance of GEMS to their business operations. GEMS is a new market and its outcome or performance is still not defined. Individuals have a tendency to choose alternatives for which the likelihood of a great result is known over the likelihood of unfavorable result which is obscure. The risk averse investors tend to put money into 'safe investments' e.g. Government bonds, bank deposits and familiar stocks.

2.2.4 Market Segmentation Theory

It rose in the mid-1950s and thrived amid the period between mid 1950's and late 1970s. Amid the 1980s the hypothesis lost enthusiasm for mainstream researchers and no huge commitments made. Be that as it may, towards the start of the new thousand years, the market segmentation theory regains new attention. The market segmentation theory postulates that there is market segmentation. It's division of business sectors into homogenous gatherings of purchasers, each of the portions responding diversely to valuing, correspondence, advancement and different factors of the promoting blend. Each purchaser has inclinations, singular needs, assets and practices. Since it is for all intents and purposes difficult to provide food for each customer's individual attributes, advertisers amass purchasers to market fragments by factors they have in like manner.

These basic qualities permit building up an institutionalized advertising blend for all clients in this fragment (Dickson & Ginter, 2011).

An organization can't serve all shoppers in a wide market, the buyers are excessively various and different in their purchasing necessities thus companies are identifying the market segments they can serve effectively. Classifying consumers into groups based on psychographic segmentation can help an organization to develop a better understanding of the consumer's desires, needs, anxieties and possible behaviour. Market segmentation has enabled NSE come up with policies that are favourable for each individual market thus serving both investors and firms efficiently.

The NSE has currently been segmented into four different market segments discussed as follows;

2.2.4.1 Main Investment Market Segment

This is the major segment of the market comprising of 50 quoted firms. The minimum eligibility conditions and listing requirements for this segment include but not limited to the fact that the organization must have a base approved, issued and completely paid up share capital of Kshs 50 million and net resources of Kshs 100 million preceding general society offering of shares. It is important to further note that the firms in this segment are further segmented according to the nature of the industry into Agricultural, Commercial and Services, Finance and Investment, Industrial and Allied, Insurance etc. (NSE, 2016).

2.2.4.2 Alternative Investment Market Segment

This is a smaller segment compared to MIMS and comprises of 10 listed firms. The minimum eligibility conditions and listing requirements for this segment include but not limited to the fact that the organization must have a base approved, issued and completely paid up share capital of Kshs 20 million and net resources of Kshs 20 million preceding general society offering of shares (NSE, 2016).

2.2.4.3 Fixed Income Securities Market Segment

It's a debt capital market segment for companies that intend to list their business papers or corporate securities in the settled wage securities. The minimum eligibility conditions and listing requirements for this segment include but not limited to the fact that the organization must have a base approved, issued and completely paid up share capital of Kshs 50 million and net resources of Kshs 100 million preceding people in general offering of commercial paper or bond. At NSE this segment is still underdeveloped, currently with only the 4% and 7% Kenya Power & Lighting Preference shares (NSE, 2016).

2.2.4.4 Growth Enterprise Market Segments

This is the newest segment in the market and it was set up by Nairobi Securities Exchange for growth of small and medium measured firms to raise progressing and beginning generous capital, while profiting from expanded profile and liquidity inside an administrative domain planned particularly to address their issues. It comprises of 5 listed firms and the minimum eligibility conditions and listing requirements for this segment

include but not limited to the fact that the company must have a base approved, issued and completely paid up share capital of Kshs 10 million of no less than 100,000 partakes in issue. All shares issued should be immobilised and they should have been in business for one year with skilled board and senior administration with no less than 1 year encounter (NSE, 2016).

2.3 Determinants of Stock Market Performance

(Pardy,1992) declares that there are two fundamental building squares vital for a flourishing securities showcase: first is monetary and macroeconomic environment that is helpful for the supply of good quality securities and adequate interest for them; and second a market foundation fit for supporting proficient operation of the securities advertise. Under the principal precondition, the creator clarify that the interest for and supply of securities is essentially connected to the condition of the full scale economy. In the event that the large scale economy is helpful for productive business operation, an adequate number of sound organizations can create to a phase where access to securities markets is valuable for their proceeded with development.

Pardy (1992) further perceives the significance of tax collection (monetary environment). Researcher observes that capital raising and investments decisions are distorted by differential successful assessment rates on either wage or capital additions from various money related instruments. He bolsters this conclusion by watching that a significant number of creating nations with state responsibility for banks have charge rates that separate for request stores and reserve funds rather than securities venture, and for

obtaining from banks instead of raising capital from general society. For capital market improvement, these tax assessment differentials must be evacuated. It has been established that varying assessment treatment of obligations and value can make different expenses in the utilization of obligations back, new issues of shares and retained earnings.

Pardy (1992) explains that second precondition the market infrastructure, intends to make the securities markets work in stable way, reasonable and productive. It can be broken into three: One is the institutional foundation, which gives the operational premise to the market. This identifies with middle people that give venture administration, exchanging and budgetary consultative administrations; market and market related administration supplier for stock trades, showcase data administrations, over-the counter markets, exchange freedom and settlement frameworks, and enlistment and care, securities exchange; and suppliers of subordinate administrations, for example, bookkeeping and inspecting, monetary valuation, lawful guidance and obligation rating administrations.

The second part of the market infrastructure condition; regulatory infrastructure which supervises the market, as well as incorporates self-administrative associations, for example, stock trades, bookkeeping principles sheets, bookkeeping and reviewing proficient affiliations and comparable associations. It additionally incorporates the tenets and controls, offices, for example, stock trade posting and delisting exchanging guidelines, bookkeeping and examining measures, systems in addition to the checking and implementation of these principles. Third part of market infrastructure; lawful

foundation which gives the premise to the operational and administrative system. It accommodates rights and responsibilities of participants in the market, property rights, contractual relationships and forms of incorporation. It additionally determines the forces and obligations of the self-regulatory organizations and government supervisory authority (Pardy, 1992).

Pardy (1992) further explains an organization that raises stores from the general population is required to uncover adequate data to permit speculators settle on sensible venture choice so that the total of financial specialists' choices might be a decent evaluation of an organization's worth. This requires a viable lawful framework to indicate and authorize exposure gauges for all organizations issuing securities for people in general. Chuppe and Atkin (1992) plots that data asymmetries are bound in budgetary markets and that in a free market, the likelihood exists that clueless speculators will be hurt by those with access to data not accessible to people in general on the loose.

Alterations in investor structure likewise influence securities exchange execution. Saunders & Connet (2009) contends that as free market activity for security change extra minutes, diverse sorts of speculators are pulled in to the market. In the event that the hazard inclinations of the financial specialists are not as those of current speculators the required rate of return tend to move appropriately, value relationship will change freely of any alteration in profit desires. The support of the institutional financial specialists at Nairobi Stock Exchange impacts estimating and returns created at the share trading system (Maghyereh, 2002).

Market sentiment additionally alluded to as the brain research of market members likewise influence securities exchange execution. Showcase notion is frequently persistent, subjective and one-sided. The dubious mass response of people to improvements influencing the share trading system is one of the components that block securities exchange anticipating. A mellow securities exchange whirlwind brought about by a spurt in business movement may make an influx of purchasing energy that raises costs to bloom levels. As a sign to this propensity, from January 1967 through December 1968 the American Stock Exchange record dramatically increased despite a business action progress of around 10% (Hubbard & Obrien, 2009).

2.4 Empirical Review

A few studies have been done on GEMS and therefore in our study we focused on studies done on GEMS and stock market related studies.

2.4.1 International Evidence

Albornoz (2004) examined 830 open firms that were recorded on London Stock Exchange. From their exploration they discovered that opening up to the world choice of organizations was connected: emphatically to their size, securities exchange valuation of different organizations inside a similar industry and adversely to their gainfulness and influence levels. In view of the investigation of post-IPO confirms, the study proposed

that 'financing needs' and 'lessening of influence' were not the central point affecting IPO choices in the United Kingdom.

(Boehmer,2004) broke down 330 German firms that opened up to the world somewhere around 1984 and 1995. The consequence of their study depended on danger examination of variables affecting the planning of IPOs. The organizations were seen from the date of IPO declaration to the date of their IPO. The accompanying components were observed to be emphatically influencing the probability of IPO: net revenues (with respect to different firms in its industry) and securities exchange returns of the organizations in a similar industry, deals and vulnerability about the future benefit. To protect the private advantages of control was observed to be a noteworthy inspiration driving remaining private.

Caccavaio, Carmassi and Spallone (2012) researched why Italian SMEs barely depend on value as an outer wellspring of fund. They analyzed a sample of listed firms through the questionnaire and they suggested review of policy mediations to give Italian SMEs suitable impetuses for listings. In Kenya we have listed only five firms since GEMS was launched although NSE master plan was to list 16 firms by the end of 2016. The policy makers should come up with appropriate incentive to attract SMEs to GEMS listings.

Foerster & Karolyi (1993) investigated impacts of market division and speculator acknowledgment of advantage costs. They analysed a sample population of over 150 firms from 11 nations that recorded their share without precedent for the US. The

findings depicted that the stocks earned a noteworthy normal abundance return of 19 percent amid the prior year posting, an extra 1.20 percent amid posting week however brought about a huge normal decrease of 14 percent amid the next year of posting. They additionally discovered that the stock beta in respect to its home file decreases from 1.03 to 0.74 by and large while its worldwide beta in respect to the world market list does not change altogether. They showcased this pattern of share values to be due to cross border listings as evidence of market segmentation due to direct or indirect investment barriers. This was consistent with the market segmentation hypothesis. Market segmentation is key for the capital market development; NSE has adopted market segmentation to facilitate the growth of its business.

2.4.2 Local Studies

Chege (2014) found out that access to credit offices decidedly impacts on the development of the main 100 SMEs in Kenya. Lending institutions should advance credit to SMEs at a favourable terms. Collateral requirements dampen the growth of SMEs. This is attributed to low capital base and lack of resources which SMEs can use as securities to secure loans from the lending institutions. Product and service range positively influence the growth of SMEs. SMEs that embrace product and services diversification realizes increase in sales volume which result to more income. The eligibility requirements for SMEs to list at the stock market is quite favourable than the requirements of the financial institutions, SMEs should take advantage of this to enhance its business growth.

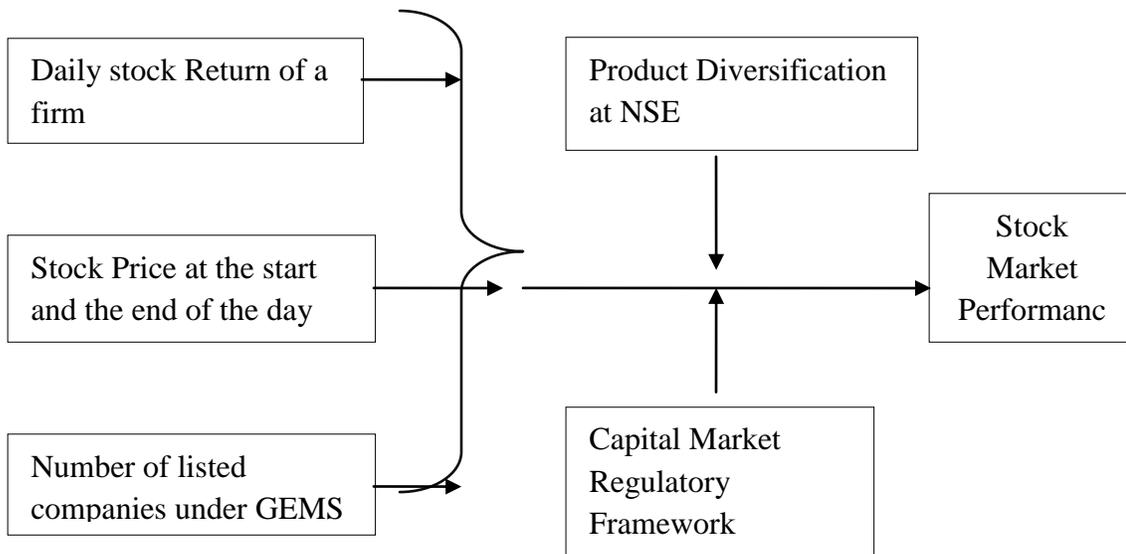
Nicholas (2011) carried out an analysis on components influencing the improvement of rising capital markets. The outcomes uncovered that there is a relationship between securities exchange advancement and market liquidity, institutional quality, wage per capita, household investment funds and bank improvement. Moreover, there are some variables which didn't clearly show the above relationship, namely macroeconomic solidness expansion and private capital inflows. It can hence be presumed that securities exchange advancement is controlled by stock exchange liquidity, institutional quality, salary per capita, residential investment funds and bank improvement. The study used only listed companies excluding the non-listed; this limits the study further since unlisted companies could also provide factors affecting the development of the capital markets in emerging economies. Some of the unlisted firms are the SMEs and other large firms that qualify to be listed under MIMS and AIMS, further investigation should be done why they are not listed at the stock market.

Ombajo (2006) research was to determine whether segmentation of NSE was harmful to any of the listed firms and investors. It sought to answer the question as to whether segmentation was necessary or not. The data collected was analysed using event study methodology. His findings indicate that liquidity and share prices of the listed firms were negatively affected after they were segmented into an 'inferior' segment. He further mentioned that this was double tragedy as even the firms and shareholders of those firms that remained in the MIMS experienced some of these adverse effects. His research also indicates that investor recognition was adversely affected, as there is significance evidence that volume traded went down. The results did not support Jacque, (2004)

assertion that segmentation is a form of financial innovation which could lead to efficiency and thus a lessening in the cost of capital without an equivalent increment in systematic hazard as no new listings were seen during the period. This study focused on two market segment MIMS and AIMS and FISMS was left out thus the finding could be subjective. FISMS is still underdeveloped and thus leads to limitation to stock market segmentation. The area of stock market segmentation has not been fully researched and the literature on stock market segmentation is based on the other countries where the market is more efficient and the inferences could be different.

Phanice (2014) in her study to establish the relationship between the selected factors and listing at GEMS in NSE. Secondary information was collected for 5 years among firms that had made decision to list and those that had not decided to list in the segment. Secondary information was obtained for 5 years from 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. The analysis depicted that the chances of a firm to be quoted is influenced by return on assets, liquidity, leverage and sales annual growth rate.

2.5 Conceptual Framework



2.6 Summary of the Literature Review

It is evident that market segmentation helps in the capital market development and the marketing strategies should be different for each segment. Securities exchange development is dictated by securities exchange liquidity, institutional quality, wage per capita, residential funds and bank improvement. The variables influencing GEMS listings include; return on assets, liquidity, leverage and sales annual growth rate. The growth of SMEs is attributed by their access to the credit facilities. Most of the SMEs cannot access the credit facilities due to the stringent collateral requirements. GEMS was established with an aim of providing capital to SMEs through equity. The studies done have focused on stock market development and listings of GEMS. This study therefore examined the impact of introduction GEMS on market stock performance at NSE.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Part shows methodology utilized in achieving the objective of research. Consists of the design research, population of study, data analysis and collection.

3.2 Research Design

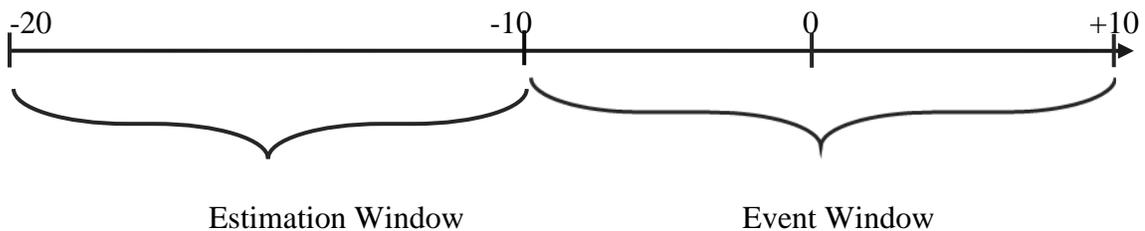
The study utilized event research methodology. An event study is an investigation of whether there is a factually noteworthy response in the budgetary market to event of a given sort that is speculated to influence open firms' fairly estimated valuations (Armitage, 1995). This method was appropriate because one can do comparison of the stock market reaction to the event by observing the performance before and after the event.

3.3 Population and Sample Design

(Cooper, 2000), a populace is the aggregate gathering of components which we wish to make deductions. The populace target in study was five firms listed under GEMS from January 2013 when GEMS was introduced to the market. Purposive sampling techniques will be used for firms listed under MIMS thus 20 share index firms will be used as representative of the entire market to enable us obtain the alpha and beta of the market before the introduction of GEMS

3.4 Data Collection

Research utilized secondary data from (NSE) i.e. Stock prices and stock indices. The event period will be 21days (-10 to +10) i.e. 10 days before the event and 10days after the event with the event day being 0. An estimation window 10days prior to the event period will be used to derive α and β for the purpose of deriving expected returns.



Daily stock returns will be calculated for all the firms and the indexes on the event period.

Daily stock returns were obtained using the following formula:

$$R_t = \frac{P_t - P_{t-1}}{P_{t-1}}$$

Where;

R_t =Daily Stock Return

P_t =Stock price at the end of the day

P_{t-1} =Stock Price at the start of the day

The return of the segment, R_m for the purpose of this study used average of daily return of each firm

$$R_{ms} = \frac{(R_{1t} + R_{2t} + R_{3t} \dots R_{nt})}{N}$$

Where;

Rms- Return for the segment

R1t- The daily stock return of a firm

N-Number of firms

Abnormal Return (AR)

For the purpose of studying impact of GEMS listings on market stock performance at NSE the share costs abnormal returns was calculated. Irregular returns was acquired by finding the contrast between actual returns of the stock i in period t after listing and expected returns of stock i in period t before listing. The accompanying is the formula for conventional minimum squares market model to calculate abnormal returns:-

$$AR_{it} = R_{it} - R_{i(t-1)}$$

Where;

AR_{it} = Abnormal return of stock i in period t

R_{it} = Actual return on stock i in period t after the last GEM firm was listed

R_{i(t-1)} = Expected return on stock I in period t (this was taken as value of last returns before the first GEM firm was listed)

Average Abnormal Returns (AAR)

This was calculated using the formula below:

$$AAR_t = \frac{1}{n} \sum_{i=1}^n AR_{it}$$

Where

AAR_t-Average abnormal return at time t

AR_t- Abnormal return of stock i at time t

n-size of the sample

Cumulative Average Abnormal Returns (CAAR)

After calculation of strange returns of the considerable number of securities, (CAARs) was processed amid occasion period (-10 to +10). Cumulative average abnormal return was analyzed to investigate whether the event had an impact on the share price and how this information was absorbed in the share prices.

CAARs were computed as follows:

$$CAAR_t = \sum_{t=1}^n AAR_t$$

Where;

CAAR_t = Cumulative Average Abnormal Return at time t

AR_{it} = Abnormal return of security i on day t

N = Number of days in the event period

3.5 Data Analysis Techniques

This stage involved data capture, processing and tabulation. Data was validated and analysis done using regression analysis and SPSS. The study conclusions was done based on the summary of the data analysis.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

Part presents findings and a brief description of results. Results are arranged in sections namely: background information of the GEMS and the relationship between introduction of the GEMS in the NSE and the performance of the stock market. The chapter also has a section on the discussion of the findings which explains the findings and links them with previous studies and existing literature.

4.2 Background information

This section provides the background of the GEMS whose data was used in this study. The background is given in terms of the financial execution of the GEMS in terms of the profits, total assets and the equity worth.

4.2.1 Pre-tax profit

Table 4.1 shows the profits before tax for the GEMS for the period between 2013 and 2015. The table shows that GEMS had mix execution of pretax profits for duration captured. The execution of Home Africa, Kurwitu and Atlas were negative as at the end of the year 2015. Flame tree group holdings had a positive trend in profits from Ksh. 173.2 million in 2013 to Ksh. 198.4 million in 2015. Nairobi Business ventures had also improved from Pre-tax profit of Ksh.1.6 million in 2013 to Ksh. 3.9 in 2015.

Table 4.1 Pre-tax profit (in Kshs. Millions)

| GEMS | 2013 | 2014 | 2015 |
|--|-------------|-------------|-------------|
| Home Afrika Ltd | 183.5 | 47.8 | -410.8 |
| Flame Tree Group Holdings Ltd | 173.2 | 144.8 | 198.4 |
| Kurwitu Ventures Ltd | -1.7 | -18.5 | -9.4 |
| Atlas Development & Support Services Ltd | -15.5 | -142.5 | -1470.0 |
| Nairobi Business Ventures Ltd | 1.6 | 11.1 | 3.9 |

4.2.2 Total assets (firm size)

The total assets of a firm or a company can be utilized as financial pointer of company's budgetary dependability. Investors look at the financial stability of a company in making investing decision on the type of company to invest in. The table shows that Home Africa and Atlas total assets dropped from Ksh.839.2 million and Kshs. 1,003.2 million in 2013 to Ksh. 731.7 million and Ksh. 447.9 million respectively. However, Flame tree, Kurwitu and Nairobi Business ventures increased the value of their total assets over the same.

Table 4. 2 Total assets (firm size) in Kshs (Millions)

| GEMS | 2013 | 2014 | 2015 |
|--|-------------|-------------|-------------|
| Home Afrika Ltd | 839.2 | 1,213.0 | 731.7 |
| Flame Tree Group Holdings Ltd | 303.6 | 536.0 | 730.2 |
| Kurwitu Ventures Ltd | 107.5 | 129.3 | 124.1 |
| Atlas Development & Support Services Ltd | 1,003.3 | 1,929.8 | 447.9 |
| Nairobi Business Ventures Ltd | 25.4 | 47.0 | 70.3 |

4.2.3 Equity

The equity of a company shows the amount shareholders have put into the company to run the business. Companies use equity to raise funds to run their operations and are one of the financing options. However, the investors must be convinced that their monies would generate returns. The equity option of financing was enabled for the GEMS firms

through their listing into the NSE market. Table 4.3 shows that Home Africa and Atlas Development equity levels declined from 2103 to 2015 but for Flame tree, Kurwitu and Nairobi Business ventures the equity had increased.

Table 4.3 Equity in Ksh (Millions)

| GEMS | 2013 | 2014 | 2015 |
|--|-------------|-------------|-------------|
| Home Afrika Ltd | 339.4 | 348.4 | -41.7 |
| Flame Tree Group Holdings Ltd | 198.1 | 407.8 | 627.6 |
| Kurwitu Ventures Ltd | 107.4 | 127.9 | 121.3 |
| Atlas Development & Support Services Ltd | 949.7 | 1,892.1 | 360.1 |
| Nairobi Business Ventures Ltd | 11.1 | 18.9 | 45.4 |

4.3 Effect of the GEM segment on the returns

In this section presents the use of occasion consider technique to explore the impact of the introduction of the GEM segment on the NSE stock market performance. This involves the calculation of the returns of each firm listed within the list of 20 share index.

4.3.1 Calculation of the daily returns

This formula was used to calculate the daily stock returns.

$$R_t = \frac{P_t - P_{t-1}}{P_{t-1}}$$

Where; R_t =Daily Stock Return, P_t =Stock price at the end of the day, P_{t-1} =Stock Price at the start of the day. The return of the segment, R_m for the purpose of this study was taken as the average of daily return of each firm stock constituting the segment.

$$R_{ms} = \frac{(R_{1t} + R_{2t} + R_{3t} + \dots + R_{nt})}{N}$$

Where; Rms- Return for the segment, R1t- The daily stock return of a firm, N-Number of firms. The returns for the NSE 20 index were similarly calculated using the same way to get an average returns during estimation and also during the event window. The study found that on average the average returns of the firms in the NSE 20 improved from -0.00113 in the estimation window to -0.00109 in the event window. This shows that there was some slight increment in stock prices.

Table 4.4 Returns for the entire NSE

| | Over | Mean | Std. Err. | [95% Conf. | Interval] |
|----------------------|-------------------|----------|-----------|------------|-----------|
| Market return | | | | | |
| NSE return | Estimation period | -0.00113 | 0.001458 | -0.0041 | 0.001852 |
| | Event period | -0.00109 | 0.001136 | -0.00341 | 0.001228 |

4.3.2 Calculation of the Alpha and Beta

After the calculation of the average returns of the 20 share firms. The value of Alpha and Beta was estimated. The values of alpha and Beta were used to estimate the expected returns of the 20 share index firms. The results of the regression test are shown in table

Table 4.5 Estimation of alpha and beta

| Source | SS | df | MS | Number of obs | 10 |
|----------|----------|----|------------|---------------|---------|
| | | | | F(1, 8) | 3.54 |
| Model | 5.87E-05 | 1 | .000058671 | Prob > F | 0.0967 |
| Residual | 0.000133 | 8 | .000016574 | R-squared | 0.3068 |
| | | | | Adj R-squared | 0.2201 |
| Total | 0.000191 | 9 | .000021251 | Root MSE | 0.00407 |

| NSE return | Coef. | Std. Err. | t | P>t | [95% Conf. | Interval] |
|------------|----------|-----------|-------|-------|------------|-----------|
| rms | 0.119358 | .0634379 | 1.88 | 0.097 | -0.02693 | 0.265646 |
| _cons | -0.0012 | .0012879 | -0.93 | 0.38 | -0.00417 | 0.001773 |

The resulting estimation equation for the model was given as

$$E(R_{it}) = \alpha_i + \beta_i R_{mt} + e_{it}$$

Where: $E(R_{it})$ - Expected return of stock i in period t , α_i - Alpha (normal returns), β_i - beta and was used to depict the sensitivity of the stock excess return to that of the market portfolio. R_{mt} – segment return in period t and e_{it} - The unsystematic risk(avoidable risk).

The alpha and beta were calculated using the data from the estimation window. Since the unsystematic risk can be reduced by diversification. The investors were only left with systematic risk which is unavoidable. Thus the unsystematic risk was omitted from the final equation which was given as:

$$E(R_{it}) = -0.0012i + 0.119358R_{mt} \dots \dots \dots (i)$$

The results show that the values of alpha and beta were -0.0012 and 0.119358 respectively. Thus the introduction of the GEM segment increased the normal returns by 0.119358.

4.3.3 Abnormal Return (AR)

To calculate the value of the abnormal return, we calculated the expected return using the expected return equation. The corresponding values of abnormal returns of each firms stock was calculated. Using the equation ii:

$$AR_{it} = R_{it} - ER_{it}$$

Where; AR_{it} = Abnormal return of stock i in period t, Rit = Actual return on stock i in period t and ER_{it} = Expected return on stock i in period t. The average values of (AAR) during the event window are shown in table 4.6. The mean of the market returns was 0.000559 for the event window.

Table 4.6 Abnormal Return (AR)

| | Mean | Std. Err. | [95% Conf. | Interval] |
|----|----------|-----------|------------|-----------|
| AR | 0.000559 | 0.001139 | -0.00182 | 0.002935 |

4.3.4 Average Abnormal Returns (AAR)

Study calculated AAR of the NSE after the introduction of the GEM segment. This was calculated using the following formula.

$$AAR_t = \frac{1}{n} \sum_{i=1}^n AR_{it}$$

Where: AAR_t-, AR_t- AR of stock i at time t and n-size of the sample.

Value of AAR=2.8 x 10⁻⁵ as shown in table 4.7.

Table 4.7 Average Abnormal Returns (AARs)

| | Mean | Std. Err. | [95% Conf. | Interval] |
|-----|----------|-----------|------------|-----------|
| aar | 0.000028 | 5.69E-05 | -9.1E-05 | 0.000147 |

4.3.5 Cumulative Average Abnormal Returns (CAAR)

After calculation of abnormal returns of the considerable number of securities, (CAARs) was registered amid occasion period (- 10 to +10). CAARs was figured as shown:

$$CAAR_t = \sum_{t=1}^n AAR_t$$

Where;

CAAR_t = Cumulative Average Abnormal Return at time t

AR_{it} = Abnormal return of security i on day t

N = Number of days in the event period

From the data, the resulting Cumulative average abnormal return was given as:

$$CAAR_t = \sum_{t=1}^n AAR_t = 0.00058733$$

This shows that there was a slight increment of the returns of the firms in the 20 share index firms by 0.00058733.

4.3.6 Test of significant differences (Wilcoxon sign sum test)

After the determination of the CAAR on the 20 share index firms as a results of the introduction of the GEM segment in the NSE. There was need to test whether the returns in event window period were significantly higher than those in the estimation window. The two sample Wilcoxon rank sum test (10,21)=0.00, p=1.00) was insignificant showing that the returns before and after were not significant as shown in table 4.8.

Table 4. 8 Two-sample Wilcoxon rank-sum (Mann-Whitney) test

| Two-sample Wilcoxon rank-sum (Mann-Whitney) test | | | |
|--|-----|----------|----------|
| Time | obs | rank sum | expected |
| Estimation period | 10 | 160 | 160 |
| Event period | 21 | 336 | 336 |
| Combined | 31 | 496 | 496 |
| unadjusted variance | | | 560 |
| adjustment for ties | | | 0 |
| adjusted variance | | | 560 |
| Ho: CAAR(time==estimation period) = CAAR(time==event period) | | | |
| z =0.000 . | | | |
| Prob > z = 1.000 | | | |

4.4 Discussions of the findings

The study has provided reliable results on the effect and relation among GEMS and performance of the stock market at the NSE. The major constraints facing the growth of the SMEs is their accessibility to finance (NSE, 2016). The study shows that the performance of the Home Africa, Kurwitu and Atlas development and support services dropped between 2013 and 2015. However, the pretax profits of the Flame tree and Nairobi business ventures improved over the same period. Similarly, the value of the total assets also had a similar trend. Home Africa and Atlas Development & support services total assets declined in the period between 2013 and 2014. The value of the total assets improved over the same period for Home Africa, Flame tree and Nairobi Business ventures. This shows that some of the SMEs experienced some losses and thus financing their investment activities internally was impossible. The value of assets also have gone

down for some of the SMEs which may perhaps imply that some SMEs did not expand. This presents a daring situation and financial instability SMEs are facing. Thus having them registered in NSE will address the constraint such firms have been having of long term financing challenges which in turn will provide them with availability of capital to start or expand their projects (NSE 2016).

The cost of financing increments with topsy-turvy data and originates from three sources new value, inside assets and from debts (Myers & Majluf, 1984). In this study, the equity values for Home Africa, Kurwitu and Atlas development reduced between 2013 and 2015. On the contrary, Flame tree and Nairobi Business ventures had more equity in 2015 compared to 2013 showing some growth. This shows that some might have opted for other ways of financing. It is thus important that such firms get listed in NSE to be able to issue shares and get financing through equity option.

The returns of the NSE 20 index firms improved slightly from -0.00113 in the estimation period to -0.00109 in event period. The alpha value of the equation was -0.0012 meaning that the returns without GEM segment would be -0.0012 . The value of the beta was positive meaning that changes in the GEM segment caused incremental changes in the NSE market by 0.11935 . This shows that a positive elasticity of the GEM segment on the NSE market. Further the study found that introduction of the GEM segment brought about Abnormal returns (AR) of 0.000229 . The average abnormal returns was 0.000028 for each NSE 20 index firm. The cumulative average abnormal return was 0.00058733 . This shows that the launch of the GEM segment has had a

positive contribution on the returns of NSE stock market. A similar study by Maghyereh, (2002) found that cooperation by institutional investors at NSE impacts estimating and returns created at stock markets. This could imply that participation of different segments in NSE have impacts to the entire stock market. Also changes in the composition of the investors affect the stock market performance. According to (Saunders & Connet, 2009) in the event that the hazard inclinations of the speculators are not as those of current financial specialists the required rate of return tend to move in like manner, value relationship will change autonomously of any alteration in profit desires.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Part presents the results and a discussion of the findings. The chapter concludes the study by providing a summary of the findings, the conclusion and recommendations of the study. There is also a section on the suggested areas for further research.

5.2 Summary of the findings

Research depicted effect of the introduction of the GEMS on the stock market performance at the NSE. The study found that the firms already listed under the GEMs had mixed financial performance in terms of profitability. Some firms had increasing trends in terms of profitability and others had varying amounts of profitability. Also some have positive financial indicators such increasing level of total assets and equity levels. However, others have performed dismally over the last three years. This could be perhaps due to the limited opportunities of accessing financing. The introduction of the firms in the NSE will thus go a long way in strengthening the firms' ability to access financing through equity option since use of internal and debt options could be challenging for the smaller firms.

The introduction of the GEMS in NSE has been of prime importance. The segment has positively influenced the stock value over time. The initial price level of the shares and the current price level of the shares improved. The launch of the segment had slight implications on the returns of the stock. The value of the abnormal returns (AR), the average abnormal returns (AAR) and the cumulative average abnormal returns (CAAR) were positive. This shows the market experienced some slight changes occasioned by the segment.

5.3 Conclusions

The study has shown very important findings on the relationship and effect of the introduction of the GEMS on the stock market performance. The introduction of the GEM segment in NSE slightly affects the returns. The returns before and after the listing of the firms in the segment were different. There was some improvement in the general return level showing that the segment has some slight influence on the returns of the stock in the NSE.

5.4 Recommendations

The introduction of the GEMS in NSE was found to have impacts on the average stock value of the firms listed at NSE. This depicts the important effect the segment has on the market operations. Thus to improve the market and strengthen the activities of the market, it is important that the government provides incentives to attract more SMEs to apply and get listed with the segment. This may include among others, increasing the

benefits of getting listed in the segment and further making the listing process more transparent and easy.

5.5 Suggestions for further areas of research

The study covered majorly the data just before the first GEMS firm was introduced to the NSE and the period after the listing. This data covers only the stock value and performance. However, the study has not considered the performance of the GEMS firms on other areas of financial performance such as their profitability, their efficiency or even their return on assets (ROA) or return on equity (ROE). It is thus recommendable for another study to be done on the effect of GEMS introduction in NSE and their respective financial performance apart from the stock value. Such a study will be helpful to the policy makers on the effects of listing of such firms at NSE. Thus the information generated will be useful to various stakeholders.

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APPENDIX I: ELIGIBILITY CRITERIA FOR LISTING ON GEMS

1. Public company registered under the Companies Act
2. Minimum fully paid up capital of 10 million
3. At least 100,000 shares in issue
4. Free transferability of shares;
5. Adequate working capital and solvency
6. Operation for at least one year
7. No profitability record required
8. directors, 1/3 non-executive
9. Directors with no bankruptcy, fraud, criminal offence or financial misconduct
Proceedings for 2 years
10. Competent board and senior management – at least 1 year experience in the
business.
11. 1/3 board must have completed Directors Induction Program and the rest within 6
months of listing
12. All issued shares to be immobilized
13. 15% of the shares must be available for trading & held by at least 25 independent
shareholders within 3 months of listing
14. Controlling shareholders lock in for 24 months
15. NOMAD appointed by written contract.

(Source: NSE Website 2016)

APPENDIX II: NUMBER OF FIRMS LISTED AT NSE

Agricultural Sector

Sasini Limited

Commercial & Services Sector

Kenya Airways Limited

Nation Media Group

Scangroup Limited

Centum Investment Company Ltd

Banking Sector

Kenya Commercial Bank Limited

The Cooperative Bank of Kenya Limited

Standard Chatered Bank Limited

Barclays Bank Limited

Equity Bank Limited

CfC Stanbic Holdings Limited

Manufacturing & Allied Sector

East African Breweries Limited

British American Tobacco Kenya Limited

Athi River Mining Limited

Bamburi Cement Limited

Energy & Petroleum Sector

KenolKobil Limited

Kenya Power Limited

Kenya Electricity Generating Company Limited

Insurance Sector

British-American Investments Company (Kenya)
Limited

Telecommunications and Technology Sector

Safaricom Limited

(Source: NSE Website 2016)

APPENDIX III: The Estimation and Event window data

| Days | NSE returns | GEM segment returns | Expected return | Abnormal return (AR) | Average Abnormal Return (AAR) |
|------|-------------|---------------------|-----------------|----------------------|-------------------------------|
| -10 | 0.00299 | 0.002104 | -0.00095 | 0.003935 | 0.000197 |
| -9 | 0.001253 | -0.03036 | -0.00482 | 0.006073 | 0.000304 |
| -8 | 0.004865 | -0.00794 | -0.00214 | 0.007009 | 0.00035 |
| -7 | 0.002621 | -0.01303 | -0.00275 | 0.005373 | 0.000269 |
| -6 | -0.00577 | -0.00926 | -0.0023 | -0.00347 | -0.00017 |
| -5 | -0.00734 | 0 | -0.0012 | -0.00614 | -0.00031 |
| -4 | 0.005427 | 0.021314 | 0.001347 | 0.00408 | 0.000204 |
| -3 | 0.000535 | -0.01133 | -0.00255 | 0.003083 | 0.000154 |
| -2 | -0.0026 | 0.018519 | 0.001014 | -0.00361 | -0.00018 |
| -1 | -0.00503 | -0.00654 | -0.00198 | -0.00305 | -0.00015 |
| 0 | 0.003815 | -0.00413 | -0.00169 | 0.005505 | 0.000275 |
| 1 | -0.00468 | -0.00714 | -0.00205 | -0.00263 | -0.00013 |
| 2 | -0.00425 | -0.00533 | -0.00183 | -0.00242 | -0.00012 |
| 3 | -0.00685 | -0.01318 | -0.00277 | -0.00408 | -0.0002 |
| 4 | -0.00842 | 1.86E-08 | -0.0012 | -0.00722 | -0.00036 |
| 5 | -0.00837 | -0.00893 | -0.00226 | -0.00611 | -0.00031 |
| 6 | -0.00111 | -0.00987 | -0.00237 | 0.001267 | 6.34E-05 |
| 7 | 0.001665 | -0.00772 | -0.00212 | 0.003784 | 0.000189 |
| 8 | 0.005483 | 0.018557 | 0.001018 | 0.004465 | 0.000223 |
| 9 | -0.00555 | 0.003628 | -0.00076 | -0.00478 | -0.00024 |
| 10 | 0.008374 | -0.00948 | -0.00233 | 0.010702 | 0.000535 |