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Signaling as a determinant of rights issue performance in Nairobi Securities Exchange

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SIGNALING AS A DETERMINANT OF RIGHTS ISSUE PERFORMANCE IN NAIROBI SECURITIES EXCHANGE

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DECLARATION AND APPROVAL

DECLARATION

I solemnly declare that this research project is my own work and has never been previously submitted in Strathmore University or in any other university for approval for award of degree. In my understanding and to the best of my knowledge, this research does not contain any material previously published by any other person except where reference has been duly made accordingly.

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APPROVAL

This research thesis has been submitted with our approval as the university supervisors

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ABSTRACT

The study sought to establish signaling as a determinant of rights issue performance in the NSE. To achieve this, the study used specific objectives. The object one was to establish debt-servicing capability of the rights issuing firms, to establish signal interpreted by the equity investors regarding the financial soundness of the rights issuing firms, to establish perception of management of rights issuing firms regarding the financial literacy of equity investors and to establish other determinants of rights issue performance at the NSE. Specific objectives one up to three were analyzed using descriptive statistics while specific object four was analyzed using regression analysis. The result of objective one indicated that financially distressed firms are facing liquidity problems therefore might not be able to service debt regularly. This might be the reason for the rights issue. The findings showed that signaling also influences the rights issue performance and therefore should be regarded as one of the determinants of rights issue performance. In the fourth objective, regression result indicated that the adjusted R square was 46.6% implying that independent variables were able to explain up to 46.6% of dependent variable (rights issue performance). ANOVA results indicated a p-value of 0.002, which was below 0.05 level of significance implying that the independent variables were jointly significant in predicting rights issue performance. The regression coefficient results indicated that cash flow was the only determinant that had significant and positive influence on the rights issue performance. i.e. Increase in cash flows was associated with increasing in rights issue performance. The findings from primary data and secondary data were both in consonance with the signaling theory that cash flows are significantly influential to rights issue performance i.e. equity investors respond positively to rights issues if cash flows of the company are increasing.

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LIST OF ABBREVIATIONS

BAT	British American Tobacco
CMA	Capital Markets Authority
DTB	Diamond Trust Bank
EABL	East African Breweries Limited
EABL	East African Breweries Ltd.
KCB	Kenya Commercial Bank
KENGEN	Kenya Electricity Generating Company
KPLC	Kenya Power and Lighting Company
KQ	Kenya Airways
MM	Modigliani and Miller
NPV	Net Present Value
NSE	Nairobi Stock Exchange
ROA	Return on Asset
ROE	Return on Equity.
NI	Net Income
NACOSTI	National Commission for Science, Technology and Innovation

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

There has been a rise in the use of rights offering by listed firms in Kenya as evidence by the statistics from the Capital Markets Authority (CMA Annual Report, 2018). The report indicated that for the period 2007-2018, thirty-two firms raised funds using rights offering by issuing 8,567,451,534 rights offer. This enabled them to raise a total of Ksh 130,717,803,591. A similar trend was also depicted in the US stock markets where it was reported that more than 5.5 billion US dollars were raised either through rights issue or private placement during the period of January 2015 and November 2017 with 300 million US dollars realized from rights offering raised by seven firms in 2017 only (Goffman & Howad, 2018). Based on the significance of the amount involved, rights issue has become major source of funding for firms.

However, use of rights issue by firms is subject to the firm's capital structure since different firms prefers different capital structure. In making capital structure decision, (Myers & Majluf, 1984; Yang, 2015 and Sun, 2016), argued that there is a lot of information about the firm's quality and potential that the management knows which the investors do not know. Some of this information includes the firm's ability to generate enough returns that can conveniently be used by firms to engage in other viable investment, settling debts or simply increasing their capital level. The management also knows the benefits that may accrue to the firm for incorporating debt in their capital structure and therefore might be considerate to include debt in their capital structure. Consequently, the management are likely to consider the pros and cons of every recapitalization structure for their firms before making decision.

In spite of recognizing the task of management in capital composition of the firms, there are proponents of the Pecking Order Theory who believes that firms adopt a systematic order of raising funds. Among them include (Arkelof, 1970, Shyam, Shunder & Myers, 1999, Fama & French, 2002 and Iasonidou, 2016). They argued that when considering the capital structure, the firm should pay more attention to the cost of capital and therefore should consider retained earnings first, followed by debt then finally equity. Basing on this theory, rights issue should only be used by the firms after retained earnings and debt have been fully exploited. It is therefore logical to infer that firms going for the rights issue might be facing financial difficulties since they are unable to raise enough retained earnings and could not service the regular payments of debt facility. The question of interest is whether the signal conveyed by such decision is understood by investors and hence may have a bearing in the level of subscription of rights issue.

The proponents of the Information Asymmetric Theory, (Ross, 1977 and Zhang & Wiersema, 2009) reiterated that there is asymmetrical information between management of the firm who has first-hand information that is not available to the investors. The management, therefore, uses this information to signal to the market what they should expect as the status of the firm regarding its quality and financial performance. The signal directly affects the shareholder’s reaction which is extended to the rights issue performance. Even though there have been substantial rights issue activities at the NSE over time, and equally reasonable studies on the same, but there is no evidence of studies conducted to establish whether the declaration of rights issue elicits signaling effect making the signaling one of the determinants of rights issue performance at the NSE. The study sought to bridge this gap.

1.1.1 Signaling Effect

The signaling model was first advanced by Arkelof (1970) on the context of job and product market, but Spence (2002) contextualized the model into signal equilibrium theory where he stated that firms can be categorized into good firms and bad firms based on the credibility of the signal they are sending to the capital market regarding their quality. However, the credibility of the signal is only upheld if the bad firms are unable to copy good firms by sending the exact signals as those of good firms. For this to prevail there should be some cost barrier which bad firms are unable to pay hence maintaining the status quo (Kirmani and Rao, 2000). For this model to thrive, there should be an assumption of existence of information asymmetry between the management and the outsiders. Consequently, every firm has an option to signal or not to signal their actual quality to the public.

The announcement of rights issue may result to mixed reaction by investors and shareholders. When the announcement is received positively, it elicits confidence in the investors who believe the future performance of the company will be better hence the shareholders will be willing to take up the rights issue on offer thereby increasing the uptake of rights offered. However, when received negatively by both the investors and shareholders, their response to the rights issue is expected to be much lower with evidence of low rights issue uptake hence poor performance of rights issue and failure to meet their desired capital. (Becket, 2012).

At the NSE, either of the conditions is expected, however there are rules and regulation set by CMA to create an even playing ground requiring the firms to disclose all the relevant information to their shareholders and all the other stakeholders to enable them to make decision efficiently. The study sought to evaluate the signaling effect as a determinant of the rights issue by establishing the financial literacy of the equity investors, the equity investors concerns with the financial soundness of the firm before participating in the rights issue and assessing other determinants of rights issue at the NSE.

1.1.2 Rights Issue Performance

Rights issue is defined as an arrangement in which the existing shareholders are allowed to acquire more securities by exercising their preemptive rights (first refusal rights) based on the ratio of their share ownership in the organization, (Korteweg and Renneboog, 2002). There are different ways to approach issuing of rights offer. A firm may choose a direct right offering where the management goes directly to the shareholder. This approach is regarded as cost effective since the firm forgo the additional cost that comes with the use of the standby purchaser, Melissa Beck (2010). However, its effectiveness relies on how the shareholders participate in the rights issue offering. The firm must first of all be very sure of existing interest amongst the shareholders to take the rights issue. Consequently, this approach can be highly responsive to the signaling effect arising from the information asymmetry.

On the other hand, the firm may choose to engage standby purchaser or backstop commitment party who undertakes to purchase the rights issue that remains when all the shareholders have exercised their rights. In this approach, the management is guaranteed that all the shares allotted for the equity owners will be sold and the firm is able to raise its desired capital (Clifford. & Pontiff 2016). This approach is necessary in cases where the management has high uncertainties about the reaction of the shareholders therefore, they undertake to manage the risk of uncertainty. However, in this approach, the management incurs the cost of standby purchaser. This cost has to be paid whether all the rights have been taken by the shareholders or not since the standby purchaser has to be compensated for the opportunity cost. It also entails predetermined agreement on the share price of the rights issue. Nevertheless, this approach can be quite costly to the firm especially when considering the cost incurred to engage the standby purchaser relative to the total amount realized, (Clifford. & Pontiff 2016). Ramirez, (2011) argued that firms engage in rights offering as a means of generating more capital which they require to finance their expansions and internal operations. Therefore, the reason for raising the funds is one of the determinants of rights issue performance based on the signaling effect conveyed by the firm during the rights issue declaration (Lydia,2014).

At the NSE, the approach adopted by firm in the rights issue is at the discretion of the firm, however, the CMA regulation requires that when issuing the rights offering, the issuing firm is expected to file report with the regulatory authority, provide information and documentation to the shareholders, conduct marketing to the shareholders of the firm and then collect the exercise certificates as well as the payment from the shareholders (CMA Handbook). Melissa Beck (2010) argued that besides complying with the policies of the regulators, the exercise is also done in order to enhance successful performance of the rights issue. Studies have established that participation rate is higher for institutional shareholders as compared to individual shareholders. Moreover, it is mostly on the basis of participation that determines how successful the rights issue performs (Ross, Westerfield & Jaffe 2010, and Clifford G. & Pontiff 2016).

1.1.3. Nairobi Securities Exchange (NSE)

The Nairobi Securities Exchange was formed in 1954 as an association of voluntary stock brokers under the Societies Act. NSE underwent transformations in 1991 when it was incorporated into companies Act cap 468 laws of Kenya as company limited by guarantee but did not have share capital (Ogada, 2014 and Kibuthu, 2005).

The Securities traded include bonds and equities (NSE 2017). Since then, NSE has seen tremendous increase in the number of listed firms with the current number of sixty-five (65). NSE has continued to develop over time with progresses which include demutualization in 1996. Demutualization occurred when the ownership was transferred to some of the NSE customers. This was followed by automation of trading system of the securities in 2006 and review of the stock indices. The (NASI) NSE All Share Index as a tool for measuring the overall market performance was introduced in 2008 (Ogada et al. 2017). As a way of expanding liquidity, there was introduction of government bonds in 2009 followed by changing its name from Nairobi Stock Exchange Limited to Nairobi Securities Exchange Limited. The introduction of bonds serves as one the means companies could use to raise funds for their businesses as an alternative to use of rights issue.

The NSE is divided into three main segments which include Main Investment Market Segment (MIMS), Alternate Investment Market Segment (AIMS) and the Fixed Income Securities Market Segment (FISMS). These are further subdivided into 12 sectors upon which the analysis focus on especially those which have participated in rights issue between 2000 and 2018 period. NSE allows listed firms to participate in rights issue and provides guidance and policy on how the rights issue should be carried out, however, this has to be conducted under the guidance of the CMA. Besides creating an enabling environment for the trading of rights issue, the regulations also serve to enhance successful rights issue performance, Melissa Beck (2010).

For the NSE to carry out its duties effectively, they work hand in hand with the CMA who regulates the operations of the stock market by providing the laws that govern NSE, the dealers involved in these operations, the investment advisors as well as the stock brokers

(NSE Handbook). Over the period under review, NSE has presided over rights issue transaction with thirty-two firms in different industries participating in the rights offering raising more than Ksh 130,717,803,591. Out of these firms, only 6 firms received below 100% subscription level, 100% subscription level was only one firm, while (101-200) % were 14 firms, (201-300) % were four firms, (300-400) % was only 1 firm and (401-500) % was also only one firm. (CMA Annual Report, 2018).

1.2 Research Problem

Much effort and time has been dedicated to study rights issue by researcher for more than two decades (Bay less&Jay,2008). Majority of these studies have paid attention towards the reaction of share price due to rights issue announcement in different markets where some of them made observation of the price decline on the date of announcement (Bhana,1999, Shahid, Xinping, Mahmood &Usman,2010). At the NSE, for instance, Olesaaya (2010) who sought to establish the effect of rights issue on the stock returns observed negative abnormal returns in periods before the announcement of rights issue which turned to positive abnormal return during the announcement date and finally became negative thereafter. This observation has displayed a transition from one state to another and may contain some aspect of signaling effect which might have had impacted on the rights issue performance. However, that is not the position of other researchers whose findings have shown divergence. For instance, Owen and Suchard (2008) argued that they were unable to find any correlation between the announcement of the rights issue and the reaction of the stock prices. According to them, the stock prices have a pattern that is uninterrupted and when the announcement come when the prices were on the declining streak, the declining continues until ten days' period is over and the same happens when the announcement come when they were on the increasing streak. However, this conjecture seems to negate the signaling effect since it portends an assumption that the market is perfectly efficient and that there is no information asymmetry in existence. Therefore, any news is taken as if was expected and everybody knew about it

Another study of the NSE by Cheptoo (2006) focusing on factors influencing the rights issue reported that in terms of significance of the determinants of rights issue, the purpose for raising funds is considered the most important followed by the underwriters' experience, the profitability of the firm and finally the cost of raising funds. However, Lydia (2014) who also sought to establish the factors affecting the success of rights issue at the NSE reported different findings on the determinants of rights issue and the order of their significance. According to Lydia, the most significant factor is the shareholders take up, followed by firm's performance, the prevailing market trend, the purpose for raising funds, the subscription price, ownership structure and the availability of the underwriters in that order.

Based on the above, it is evidence that there is divergence in findings. The studies have left out the aspect of signaling effect which could have a major influence in the rights issue performance as well as the debt servicing capacity of these firms. While the dynamics of the market are at play, the determinants of rights issue as measured by the subscription level may change in terms of their significance as displayed by the finding of Lydia (2014) and Cheptoo (2006). This study sought to conduct a chronological test by first of all establishing the debt servicing capability of the firms declaring the rights issue at the NSE, followed by an evaluation of the signaling effect arising from the equity investors and finally assessing the determinants of rights issue performance at the NSE. The study sought to establish the signaling as a determinant of rights issue and other determinants and to propose to the managements and equity investors the key determinants of rights issue which they need to pay attention to.

1.3 Research Objective

1.3.1 General Objectives

The general objective of the study was to establish signaling as a determinant of rights issue performance in the NSE.

1.3.2 Specific Objectives

The study was guided by the following specific objectives:

1. To assess the debt servicing capability of rights issuing firms in the NSE
2. To examine the signal interpreted by equity investors regarding the financial soundness of the rights issuing firms in the NSE
3. To examine the perception of management of rights issuing firms regarding the financial literacy of equity investors in the NSE
4. To examine other determinants of rights issue performance in the NSE

1.4 Research Questions

The study was guided by the following questions:

1. What is the debt servicing capability of rights issuing firms in the NSE?
2. What is the signal interpreted by equity investors regarding the financial soundness of the rights issuing firms in the NSE?
3. What is the perception of management of rights issuing firms regarding the financial literacy of equity investors in the NSE?
4. What are other determinants of rights issue performance in the NSE?

1.5 Scope of the Study

This study focused of the firms listed the NSE between the period of 2000 and 2018 and participated in rights issue. The choice of listed firms' selection was motivated by the fact that they are guided by the CMA regulations to publish their financial statements besides a requirement to have the books audited. The period was of interest to the study because some firms participated in rights issue in more than one occasion. Therefore, it was thought interesting to evaluate how similar dynamics of determinants of rights issue performance reacted at different periods of time and whether they gave similar results or not. By considering the duration of up to 2018, the study intended to put into consideration the most current developments in market which may include the technology in the rights issue at the NSE. The study also intended to establish whether these factors are changing over time for a specific firm, or they remain the same for all the firms.

1.6 Significance of the Study

The result of this study is likely to benefit so many stakeholders as illustrated below:

1.6. 1 Nairobi Securities Exchange (NSE) and Capital Market Authority

The findings of this study will illustrate valuable information on the determinants of rights issues. This can be used by the NSE in enhancing their regulatory policies especially in instances where it is discovered that they can be manipulated by the managers of the company.

1.6.2 Investment Managers

The findings of this study could be very valuable to investment managers who may consider participating in a rights issue of certain companies. It will also be informative on areas to focus on in case they intend to offer rights issue in their firms.

1.6.3 Researchers

The findings of this study will add to the pool of information for researchers interested in learning about the rights issue's determinants. It will also provide empirical contribution to the local journals and articles on this area.

1.6.4 Other Beneficiaries

From the study, other beneficiaries include both local and international retail and institutional investors, listed companies and mutual fund managers since the study provides very valuable information that is very vital in rights issue decision as a way of raising funds for companies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter highlights the findings and observations made by various researchers focusing on different aspects of rights issues. The study outlines the theoretical frameworks that impacts the aspects of rights issue. This is followed by the empirical literature of the determinants of rights issue, the conceptual framework that links the independent variables and dependents variable and a conclusion by the summary.

2.2 Theoretical Review

A number of theories have been used in rights issue as related to the capital structure of the firms. The theoretical framework of this study was based on three theories namely the signaling theory, information asymmetry theory and the pecking order. For this study, signaling theory was applied to assist in exploring the signaling effect arising from declaration of rights issue, the information asymmetry theory was applied to assist in illustrating the aspect of management perception on the rights issue performance. It also elaborated on the information known by management of the firm which is not known to the shareholder and the pecking order theory elaborated about the order of preferences in making capital decision for the firm.

2.2.1. Signaling Theory

Signaling theory was first formulated by Spence (1973) by utilizing the labor market to emphasize the signaling role of education. He reasoned that since individual capabilities are learned gradually, therefore recruitment is an investment decision with uncertainties. Elton et al. (2009) postulated that information regarding the organizations are not equally available to managers and the investors alike at any one given time. Therefore, as a way of bridging this gap to enable the investors make informed decisions, the managers convey signals to the investors when they make financial decisions of the organization or by directly communicating to them

Financial market and investors are also faced with such uncertainty whenever a firm makes decision regarding raising capital. The method adopted by the firm conveys different signals which are interpreted differently in the market. Myers and Majluf (1984) posited that in regarding signaling hypothesis, issuing equity elicits a negative signal as compared to bonds which do not send any ripple signal. While expounding on the model, they explained that market is able to interpret the position of the firm based on the financial decisions made by the management. Therefore, high quality firms and low-quality firms are quite distinct in their operations such that low quality firms find it quite costly whenever they try to imitate high quality firms and therefore, they always maintain their position in the market

The study wanted to establish whether in order to achieve their target of raising the desired capital using the rights issue, firms' managers at the NSE may strive to ensure that the information conveyed in the market is able to depict a positive information to the investors eliciting the desired response and if haphazardly done, it may lead to firm's failure to achieve their intended subscription level. Otherwise, of great concern to firms should be how their action will be interpreted, Stiglitz (2000). Dittmar and Thakor (2007) also posited that the management always tries to issue the rights offer when they perceive the shareholders to have the same understanding as the management.

However, one of the criticisms of the signaling theory is that it is based on the assumption that the insiders knows the true distributions of returns of the firm while the investors do not (Ross, 1977). The markets are also further assumed to be efficient which in most cases are not. In other words, the management try to reduce the information asymmetry to its bare minimum through the signaling effect. The second specific objective of the study focused on establishing the signal interpreted by the investors concerning the financial soundness of the firm whenever the rights issues are declared by the firm while the third specific objective of the study was undertaken to establish the management perception of the rights issuing firms towards the financial literacy and expectations of equity investors in the NSE whereas the fourth specific objective established the determinants of rights issue performance and related this to the signaling effect and the information asymmetry.

2.2.2 Pecking Order Theory.

Pecking Order theory was developed by Myers and Majluf (1984) to provide a prediction that due to information imbalance between the firm and the external investors regarding the current value of the firms as well as in the future, the internal funds are less costly as compared to either debt or equity. However, the information asymmetry is not the only aspect of pecking order theory but there is also the transaction cost of funding from external sources (Harlov and Heider, 2005). The transaction cost hypothesis posit that the cost of issue is a major determinant of the type of fund chosen by a firm, while on the other hand, the information asymmetry asserts that when choosing between the equity and debt, managers have a preference for debt over the equity since going for debt is a positive signal of confidence to the investors that the management are convinced that the stocks of the firm are undervalued in the market (Myers and Sunder, 1999; Baskin, 1989; Baclays & Smith, 1999).

The model posits that firms do not strive to reach any optimal capital structure but instead make decision that is intended to eradicate those inefficiencies arising from the information asymmetry (Mayers & Majluf,1984; Haris & Raviv, 1991). They concurred that management prefer a path with minimum resistance and follow the pecking order by first issuing the retained earnings which is free from adverse selection challenges which arises on the basis that managers are more informed about the firm than the investors, but when retained earnings are exhausted, they resort to debt and finally equity when it proves not plausible to administer debt anymore

However, one shortcoming of the pecking order theory is that it is based on the assumption that capital markets are perfect which are not usually the case. Therefore, may be by concluding that all firms subscribe to the pecking order theory implies overrating the theory, especially on its application to the Kenyan stock market. The model has received empirical approval and criticism almost on equal measures. The critics like Baskin (1989), Allen (1993), Adedji (1998) argued that information asymmetry and transaction cost might not be the only factors discouraging the use of debt and equity but also factors like control consideration may make equity not favorable for the investors intending to retain their control. Another critic of this theory to be confirmed by this study since it supports issuing the rights offering is an argument by Fama & French (2005). They argued that issuing equity to shareholders or employees does not change the ownership structure, therefore, they are fewer subjects to the information asymmetry resulting to a reduction of information cost.

In the NSE context, since the market is a developing market, the information asymmetry must be prevalent to outside investors, therefore, in order to mitigate such risk, these investors are likely to require reasonable premiums on new equity or debt issue. This is likely to raise the cost of external funds thereby creating room for the use of internal funds for firms listed at the NSE and only considering debts whenever there is need for external funds. This may provide a stronger justification for application of the pecking order theory in the NSE market. But on the other hand, the asymmetry of the information has been reduced by the CMA by ensuring that the firms indicate all the relevant information to all the participants in the market through Companies Act, Electronic Trading System, and the NSE regulations. These efforts by the regulator are aimed at enhancing transparency, increasing competition and also increasing the volume of trading. This theory is very relevant in this study based on its guidance on financing decision guidance.

2.2.3 Information Asymmetry Concept

Information asymmetry concept was developed by George Arkelof (1970) to illustrate a scenario where there are sellers and buyers yet the sellers have superior information than the buyers regarding the quality of the goods they are selling. Osano & Languitone (2016) argued that asymmetric information may lead to market imbalance with a far-reaching implication. In the corporate sphere, the managers, who are playing the role of agents has more information than the shareholders, who are the principals resulting to the agency problem of moral hazard or adverse selection (Jensen and Meckling, 1976).

According to Jensen et al., moral hazard arises when there is lack of effort by management since the principal is not available to directly monitor the agents’ actions due to restrictions. On the other hand, the adverse selection arises when the restriction veil of the principal has been lifted but the principal is still unable to verify whether the efforts and decisions of the agent are the appropriate ones. This is the kind of scenario that investors find themselves, especially the adverse selection, whenever the management decides to raise funds using the rights issue. However, since the agents are aware that the principals are facing uncertainty, the agents make deliberate action of communication to persuade the principal and other stakeholders that their decision is based on high quality and value (Spencer, 1973).

In regard to the rights issue, studies have reported that there exist a positive association between the information asymmetry and the equity funding (Bharath et al 2006, Selahi et al.2014,). Bharath and the associates reported that during the period of 1973 to 2002 capital structure of US firms was greatly influenced by the information asymmetry. With great insights from the previous studies, this theory guided the study in understanding position of management and the investors in the rights issue decision and subsequent performance at the NSE and also established the debt servicing capacity of right issuing firms in the NSE in order to establish the specific objective one as a result of information asymmetry

2.3. Empirical Review

Different researchers have conducted studies on different aspects of rights issues of firms in different markets with varied aspect of results. The following variables illustrates various aspects of these variables:

2.3.1. Flotation Cost

Flotation costs are the cost incurred by the firm in the process of issuing new securities. The cost comprised of the following: (1) Direct expenses which includes printing cost, cost of advertising, listing cost, underwriting fees, legal charges and accounting charges. (2) Indirect expenses include reduction in stock prices, stock price reactions due to rights issue and cancellations of rights issue Eckbo et al. (2007). These costs are firm specific and are dependent on the type of security on offer. In considering the above cost, rights issue is considered to be relatively cheaper since such cost as listing and costs of making brochures are not incurred McLaney (2006).

Despite the fact that the costs of rights issue are considered to be lower than the other forms of equity issue, at times it can be so significant based on the amount of indirect cost incurred resulting to a smaller net proceeds of the rights issue Ginglinger et al. (2013). While this cost could be very substantive, the UK stock market reported that 5.8% of the funds raised through rights issue between 1985 and 1996 were the indirect cost and this cost is more pronounced especially in instances where the shares are illiquid (Armitage, 2007 and McLaney, 2006). In firms where the shareholders are not willing to allow transfer of wealth, they minimize any indirect cost involved in rights issue especially underpricing of securities which is regarded as the major cost incurred in security offering (Eckbo & Masulis, 1992, Norli 2004 and Lydia 2014). The signaling theory plays out vividly on the price of the securities especially on instances where the market price of the securities drops significantly following the announcement of the rights issue. Since the flotation cost is a key determinant on the choice of security to be used by the firm, the lower it is, the higher the net revenue from the security issue (Eckbo et al. (2007).

At the NSE, the willingness of the firm to incur the floatation cost or forgo the floatation cost can serve to relay the signaling effect about the quality and the status of the operations of the firm. Based on the theoretical prediction between the flotation cost and the rights issue performance as supported by the above theories, this study assessed the total cost as a percentage of the total funds raised from the rights issue as the variable measure. The flotation cost was helpful in establishing the second and third objective on of signaling effect and the fourth specific objective of other determinants of rights issue performance.

2.3.2 Cost of Underwriting

Underwriting entails an arrangement where management agrees with that third parties to take up all the right issue which might remain after the shareholders exercise their rights, mostly investment banks, Holderness et al. (2012). This arrangement acts as a guarantee for the management to realize the actual amount they have sought to receive. Holderness asserted that firms often approach the investment bankers or standby investors for such arrangements. Their study observed that most firms prefers standby buyer by 25% relative to the 6% of the investment banks. The possible explanation to this is that most of the standby buyers are internal shareholders and are better preferred by the firm than the outsiders. Secondly, the investment banks normally set relatively higher charges thereby reducing the net income from the rights issue. However, firms have an option to forgo the underwriting cost by relying on faith that the shareholders will take all the rights issue and bear the risk in case they fail to exercise their rights.

Eckbo & Masulis (1992) and Heron et al. (2004) observed reasonable increase in equity capitalization in instances where the rights issues are uninsured relative to where they are insured. Fung et al. (2008) asserted that Chinese market has a requirement that before a rights issue is made, the firms must have underwriters in place. However, the practice of having an underwriter does not work the same for all the firms. Firms with poor financial conditions and those perceived to be younger normally finds it quite difficult to secure an underwriter but in case they are able to find, the charges required are quite high making it not so ideal for them. Therefore, most firms upon considering the cost and the potential of their shareholders to take up the rights issue prefers to go for the uninsured rights issue Ursel (2006). However, Eckbo (2008) reported that he observed a paradigm shift overtime demonstrated by firms in developed economies where they are embracing diversification of ownership by ensuring that firms exercise underwriting in their right issue. At the NSE, listed firms are not bound by laws to use underwriters in the rights issue but may choose to use them or may go directly to the shareholders. The cost of underwriting was used in this study to address the second and third as well as the fourth specific objectives. This study assessed the cost of underwriting and evaluated how significant is it relative to the amount the firm had raised.

2.3.3. Profitability of the Firm

When raising rights issue, the firms may choose to engage the underwriters in order to insure for assurances purposes, may decide to go directly to the shareholder or may decide to use both Balachandran et al. (2009). However, going directly to the shareholders would mean that if the shareholders fail to take up all the shares issued then the firm is likely to fail in achieving its targeted amount of funds. However, engaging the underwriters also imply that the firm must incur the extra charges, though the firm is assured of achieving its targeted capital (Barnes 2008). He argues that the firm without a stronger financial muscle will prefer to forgo use of underwriters and rely on the shareholder’s participation alone even though they face the risk of failing to meet their target in case the shareholders fails to buy all the rights issue. They further added that whenever the firm chooses to use the underwriters, they consider its financial strength and in cases where the firm is small or is not performing well financially, the underwriters may decline but if they accept, then they charge quite expensively.

Based on the efficient market hypothesis, the information asymmetry model posits that some information will reach the market unevenly but finally the market will react appropriately based on how this information has been absorbed. The information impacts the securities price in the market and in situation whereby the firm is facing financial crisis, the prices will drop. This information signals to the market that the firm is undergoing challenges. This implies that the discount must be set reasonably higher as an incentive to either the shareholders or the underwriters (Myers and Majluf, 1984, Korajczyk & Levy, 2001,). Therefore, when a firm show unstable financial performance, it may fail to raise its desired funds due to the above reasons. This is also likely to affect its share prices in the market which in turns may result to a lower rights issue subscription level.

Profitability of the firm was used to evaluate the first specific objective of the debt servicing capability of rights issuing firms in the NSE, both the second and third objectives as well as the fourth specific objective of determinant of rights issue performance. It was also used to evaluate any signaling effect arising from the declaration of the rights issue as interpreted by the equity holders. Based on the theoretical prediction between the profitability of the firm and the rights issue performance as supported by the above theories, this study assessed return on asset (ROA), Return on Equity (ROE), Net income and cash flow as variable measures.

2.3.4. Expensiveness of Offer Price

Offer price refers to the price in which the rights issue is charged. The different between the market price and the offer price shows how expensive the offer price is. The more expensive the offer price, the smaller the difference and vice versa. Saiti (2012) argue that while it is upon the shareholders to decide on the amount of discount allowed in the rights issue, a larger discount is likely to benefit the shareholders especially those holding large stocks in the firm since they stand a higher gain on this. In this case the incentive is arising from within the shareholders and in a situation where their interest is met, many of them will be motivated to exercise their rights as compared to where their interest is not met, which is likely to compromise their participation.

While appropriate pricing of the rights offer is ideal, the markets normally react to the announcement of rights issue with studies reporting a negative price reaction when the price set is resulting to a large discount, Armitage (2002). This study was set to establish the effect of rights issue pricing on the rights offer performance by comparing the market price and the intrinsic value of the rights offering.

Based on the theoretical prediction between the expensiveness of offer price and the rights offering of firms as expounded above, the study focused on the discount given by establishing the difference between the market price of the share and the share intrinsic value as the measure of the variables. The expensiveness of the offer price was used to evaluate the second and third specific objectives as well as the fourth specific objective of other determinants of rights issue performance at the NSE.

2.3.4. Offer Size

Offer size refers to the number of rights issues that firm is set to issue in the market. The offer size built on earnings shorts fall theory of Miller and Rock (1985) hypothesize that when the firm issue more rights offering than was expected by the investors, it is interpreted that the firms' earnings has reduced thereby affecting the reaction of the investors toward the rights issue. On the other hand, it is argued that the rights issue offer size has an inverse relationship with the stock prices in the sense that investors interpret large offer size to imply unfavorably compared to smaller ones, Krasker (1986). He further argued that offer size has a direct relationship with overvaluation of the firm. This is a pointer to the reaction of the investors and is likely to influence the determinants of rights issue performance.

Firms with large offer size are reported to have a high preference of selecting fully underwritten rights issue (Balachandran et al.2008). On the other hand, larger offer size is viewed positively to reflect the confidence of the management in the firm and is seen as a positive signal of profitable growth potential of the firm (Ambarish et al.1987). This study sought to establish how the offer size of the rights affect the determinants of rights issue performance at the NSE. Based on the theoretical prediction between the offer size and the rights offering of firms as expounded above, the study focused on the offer size by establishing the offer size as determinants of rights issue and assessed its impact on the performance of rights issue at the NSE. This variable was used to elaborate on objectives two and three as well as objective four of other determinants of rights issue performance.

2.3.5. Cash Flow

Free cash flow is defined by Jensen (1986) as cash flow which is over and above the required funding for a project with a positive NPV. He argued that corporate managers never prefer disbursing free cash flow to the shareholders even if there is no investment opportunity with a positive net present value (NPV). He refers to this model as the free cash flow hypothesis which he argued consist of agency cost arising between the managements and the shareholders and the information asymmetries. The theory asserts that the managers will consider all the project available for funding and commit internal funds first. However, they may even adopt those projects with negative NPV. But this action is contestable by shareholders since they prefer to be paid dividends instead of engaging in the projects with negative NPV. Easterbrook (1984) and Lang and Litzenberger (1989) suggested that the solutions to avoid the wastage of free cash flow by management is to increase the dividends paid out once all the project with the positive NPV has been considered.

Jensen further pointed out that managers have preference for equity financing over debts when funding new projects. This is because debts covenants commit the firm to pay out cash thereby reducing the amount of cash flow available for the managers, while on the other hand, equity issues do not require regular payment of cash flow thereby increasing the available free cash flow to the managers which enhances the performance of the firm and its value. This argument does not concur with the pecking order theory especially on preference of equity over debt based on the argument that servicing debt may lead to reduced cash flow that could have been used for investment with positive NPV, (Stulz, 1990). Furthermore, Copeland & Weston (1988), also believed that a profitable firm in an industry with few opportunities for investment have no incentives to engage debt funding in their capital structure and will therefore have relatively low debt –to-equity ratio while unprofitable firm in a similar industry will have a high debt-to- equity ratio.

Based on the theoretical prediction between the cash flow stability and the rights offering of firms as expounded above, the study focused on the net increase in cash and cash equivalents for the five-year period before the rights issue. The cash flow was used in this study to assist in establishing the specific objective one of establishing the debt servicing capability of rights issuing firms in the NSE, assessing the signal interpretation by the equity investors regarding financial soundness of the firms as well as the fourth specific objective of determinants of rights issue performance at the NSE.

2.3.6. Reason for Funding

In the list of reasons to raise funds includes general corporate purposes, recapitalization, and investment, Lydia (2014). The events preceding the rights issue is interpreted differently by the investors based on the signal it has portrayed in the market. When the market is signaled that the purpose of raising funds by rights issue is for investments purposes, there are always overwhelming response and the performance never show any hitches after the issue, (Fung et al., 2008). In most cases, the prices remain the same. However, for those firms whose purpose for raising funds is either for general purpose or for the recapitalization, the signaling effect they are sending to the market is normally interpreted to show that the firm is facing financial difficulty. This is normally reflected by a drop in the share prices after the rights issue, difficulty in securing underwriters and low exercise of the preemptive rights issue (, Fung et al. 2008, Don et al. 2009; Lidya 2014). The signaling effect model posit that the mostly those firms undergoing financial distress prefers using rights issue as a method of raising funds. The level of financial distress impacts on the response by the investors and therefore for those adversely affected financially, the intensity of failure to secure funds also moves from those in deep distress to those in less distress (Ursel,2006 and Eckbo, 2008).

Based on the theoretical prediction between the reasons for raising funds and the rights issue performance as supported by the above theories, this study adopted dummy variables here as follows (Investment-1, General purpose-2, Debt servicing-3) as variable measures. Study evaluated which of these reasons results to a higher subscription level and this was used to establish the second and third specific objectives as well as specific objective four of other determinants of rights issue performance at the NSE.

2.3.7 Retention of Ownership and Control

Existing shareholders are always concerned whether they should retain their control and ownership or open it up to the outsiders. Large shareholders with control in the firms prefers protecting their status quo and can easily be motivated by just a small discount on the rights issue in order to exercise their rights, while a small discount might not appeal to the potential outside investors when facing the same decision (Saiti 2012).

In order to reserve ownership and controls, different jurisdictions have demonstrated different practices. For instance, in UK, the policy guiding the preemption rights are laid out in the London Stock Exchange's Listing Rules as well as Company's Act 1985 showing that before new issues are made to the public, existing shareholders have got "the right of first refusal". The use of rights offering is also the preferred method of raising capital in the Asian and European stock markets guided by the same principles (Chilstrom, Goldschmidt and Chaudry, 2009, Koenig 2012). However, the applicability of these policies is not strongly observed in some countries within Europe as evidenced in French financial markets where firms are at liberty to decide between the two major flotation methods: public offering and rights issue (Ginglinger, Matsoukis and Riva, 2013).

In the US, the use of rights offering is not predominant despite the fact that it is considered to be cheaper than the other methods of raising capital (Ross, Westerfield and Jordan, 2008). Holderness et al. (2012) in his wisdom attributes this anomaly to two factors. Firstly, other countries have lower level of wealth transfer in form of rights issue therefore when such opportunity present itself, is quite attractive to shareholders or management. Secondly, the existences of legal rights in other jurisdiction like UK is lacking in US which could act as a motivator to the shareholders to consider (Barnes et al. 2006). On the other hand, in the African context, there is no evidence of reinforcing legal policy regarding the rights issue but firms adopt different practices as decided by their shareholders.

In Kenya the shareholders are protected by regulation and have a preemptive right over and above the outside shareholders, (Companies Act, 2015). Therefore, the practice is that shareholders have preemptive rights but mostly they do waive these rights and in some most instances, they vote to rescind these rights (Saiti, 2012). In conclusion, markets where the policies give preferences to the shareholders in the rights issue practices tends to propagate the retention of ownership and control as compared to those without. Instances where shareholders are not willing to participate, the firms recommend to them to sell their rights in order to avoid transfer of wealth and control (Mclean et al. 2010 and Holderness et al. 2012). This study sought to establish how ownership and control as a determinant contributed to the success of right issue performance by assessing the share ownership state after the right issue. The retention of ownership and control was used to establish the second and third specific objectives as well as the fourth specific objective of the other determinants of rights issue performance at the NSE.

2.3.8. Market Share

Market share is defined as the proportion or percentage of an industry or a market total sale that a particular firm command over a given period of time (Kenton,2018). In order for firms to gain high status in the market, their products or resources must be superior to their rivals in the industry thereby giving them a competitive advantage over the others (Saad and Tuzhengge, 2016) They further argued that market share position is directly proportional to the sales performance of the firm which also has a direct link to the value of the firm. Since the market share has an impact on the performance of the firm, possibly it could also be a determining factor in the performance of the rights issue performance. This study sought to evaluate whether the market share of the firm was considered a determinant of rights issue performance at the NSE.

Based on the theoretical prediction between the regulatory market share and the rights issue performance as supported by the above theories, this study sought to assess the market share by measuring the firm's market share as a percentage of the total industry market share as variable measures. This variable was used to assess objectives two, three as well as the fourth specific objective of other determinants of rights issue performance.

2.3.9. Age of the Firm

Prove of test of time is a consideration by investors in evaluating the going concern of a firm and to minimize the aspect of uncertainty. This is the evidence presented by older firms whenever opportunity present them for analysis and evaluation before the investors, especially during the decision-making times for investments. More often than not, younger firms bore the brunt of underwriters who applies very low offer prices for them as compared to older firms in order to cater for the risk of uncertainty (Beatty and Ritter, 1986, Rock, 1986, Carter & Manaster 1998, Daily *et al* 2005).

The age is of great concern to investor since they are lacking significant information upon which to base their scrutiny on continuity of the firm in regards to the going concern (Saiti, 2012). Beatty & Ritter in their model of Information asymmetry argues that for investors to be convinced to commit their fund in those newly formed firms, they require reasonable discount on the rights issues to cover from the risk of uncertainty in an assumption that the firm will survive the market turbulence into the foreseeable future. As per the above prediction between the age of the firm and the rights issue performance as supported by the above theories. This study assessed the duration a firm had been in operation since its incorporation as a variable measure. The age of the firm was used in establishing specific objectives two, three as well as the fourth specific objective of examining the other determinants of rights issue performance at the NSE.

2.3.10. Signaling Effect

Signaling model was first advanced by Arkelof (1970) on the context of job and product market, but Spence (2002) contextualized the model into signal equilibrium theory where he stated that firms can be categorized into good firms and bad firms based on the credibility of the signal they are sending to the capital market regarding their quality. However, the credibility of the signal is only upheld if the bad firms are unable to copy good firms by sending the exact signals as those of good firms. For this to prevail there should be some cost barrier which bad firms are unable to pay hence maintaining the status quo (Kirmani and Rao, 2000). For this model to thrive there has to be an assumption of existence of information asymmetry between the management and the outsiders. Consequently, every firm has an option to signal or not to signal their actual quality to the public.

The announcement of rights issue results to mixed reaction by investors and shareholders. When the announcement is received positively, it elicits confidence in the investors who believe the future performance of the company will be better hence the shareholders will be willing to take up the rights issue on offer thereby increasing the uptake of rights offered. However, when received negatively by both the investors and shareholders, their response to rights issue is expected to be much lower with evidence of low rights issue uptake hence poor performance of rights issue and failure to meet their desired capital. (Becket, 2012).

At the NSE, either of the conditions is expected, however there are rules and regulation set by CMA to create an even playing ground requiring the firms to disclose all the relevant information to their shareholders and all the other stakeholders to enable them to make decision efficiently. The study sought to evaluate the signaling effect on the rights issue by conducting a chronological evaluation regarding the investor's financial literacy, investors' attention to financial soundness of the firm, influence of signaling effect of the rights issue performance and the investors understanding of the signal send by firm when they declare rights issue. The signaling effect was useful in establishing the second specific objective of testing the signal interpreted by equity investors regarding the financial soundness of the rights issuing firm at the NSE as well as the third specific objective.

2.4. Conceptual Framework-Signaling as a Determinant of Rights Issue

Conceptual framework illustrates the relationship between the determinants of rights issue and rights issue performance at the Nairobi Securities Exchange (NSE). The determinants identified by previous studies include retention of control and ownership, flotation cost, expensiveness of offer price, signaling effect, age of the firm, cost of underwriting, profitability of the firm, offer size, and the reasons for raising funds. The independent variables were the determinants of rights issue while the dependent variable was the indicators of rights issue performance as measured by the subscription level. The signaling effect is equally considered so important that it cannot be assumed and hence influences the performance of rights issue. This study intended to either confirm or reject this framework.

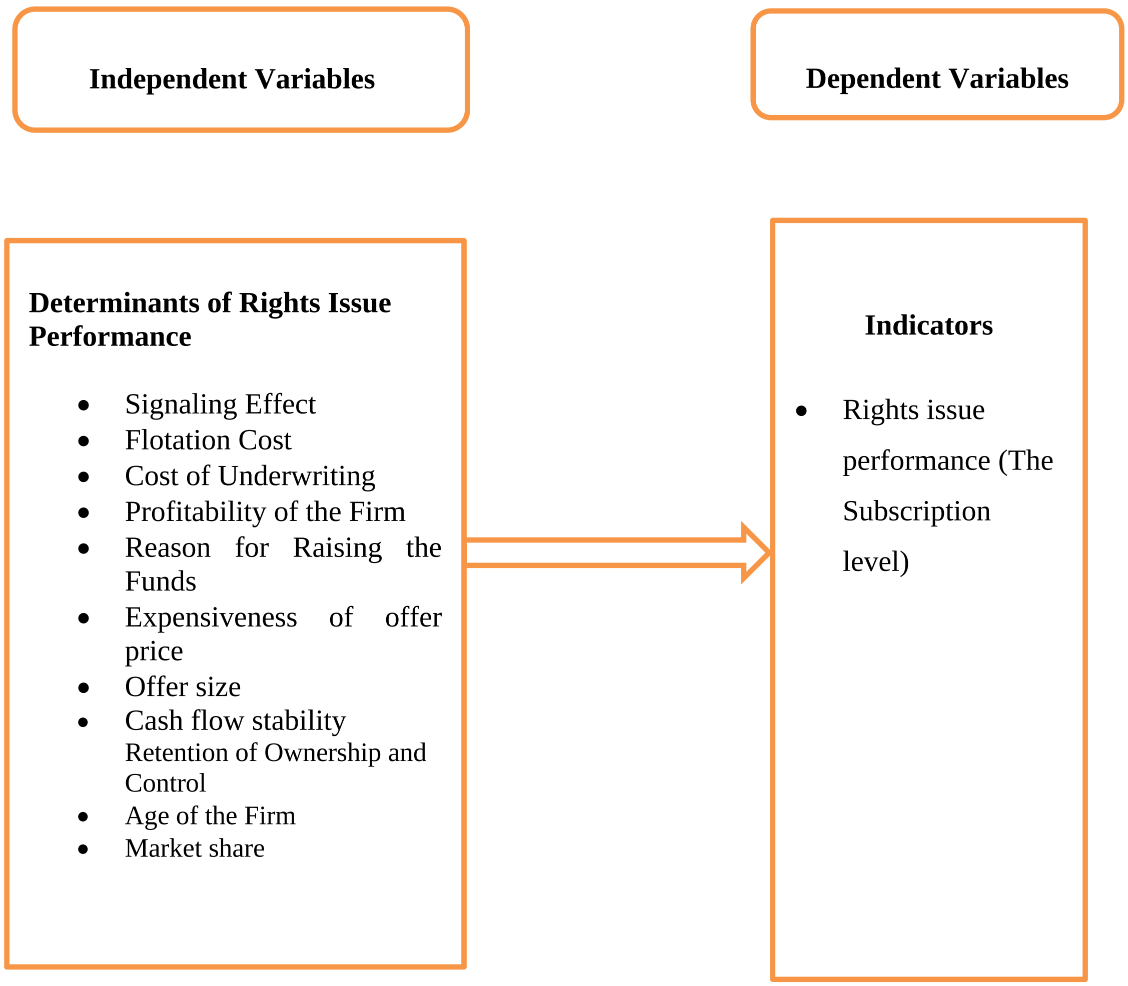

Figure 2.1: Conceptual Framework

Table 2. 1 Operationalization of the Variables

Study variables	Indicators	Measurement of Indicators	Scale	Supporting Theory	Analysis Methodology
Dependent	Rights issue performance	Subscription level	Ratio	Signaling & Information Asymmetry Theories	Descriptive statistics, Regression Analysis
Independent	Determinants of rights issue performance	Control and ownership measured by percentage of ownership after rights issue	Ratio	Signaling & Information Asymmetry Theories	Descriptive statistics, Regression Analysis
		Flotation cost measured by flotation cost incurred/total funds raised from the rights issue	Ratio	Signaling Theory & Information Asymmetry Theory	Descriptive statistics, Regression Analysis
		Market share measured by the firm's market share /total industry market share	Ratio	Signaling Theory & Information Asymmetry Theory	Descriptive statistics, Regression Analysis
		Age of the firm measured by the years in operation since incorporation.	Interval	Signaling & Information Asymmetry Theories	Descriptive statistics, Regression Analysis
		Cost of underwriting measured by the actual charges incurred /total funds raised.	Ratio	Signaling & Information Asymmetry Theories	Descriptive statistics, Regression Analysis
		Profitability of the firm measured by ROA	Ratio	Signaling & Information Asymmetry Theories	Descriptive statistics, Regression Analysis
		Reasons for raising the funds measured by dummy variables, where (1- Investment, 2-Expansion, 3 offsetting debts.)	Dummy Variable	Signaling & Information Asymmetry Theories	Descriptive statistics,
		Expensiveness of offer price of the rights issue measured as the difference between the market price and the offer price/offer price.	Interval	Signaling & Information Asymmetry Theories	Descriptive statistics Regression Analysis
		Offer Size of the rights issue measured as the total number of rights issue share on offer	Interval	Signaling & Information Asymmetry Theories	Descriptive statistics

Study variables	Indicators	Measurement of Indicators	Scale	Supporting Theory	Analysis Methodology
					Regression Analysis
	Cash flow stability	Mean of Net increase in cash and cash equivalent	Ratio	Signaling & Information Asymmetry Theories	Event study analysis, Descriptive statistics, Regression analysis
	Signaling effect	The total sum of the respondents	Interval	Signaling & Information Asymmetry Theories	Descriptive statistics

Source: Researcher (2019).

2.5. Review of Measurement of the Variables:

Lydia (2014) studied corporate financing through rights issue at the NSE and evaluated the factors influencing the success of rights issue performance. Her study employed descriptive statistics using the primary data. The study was based on the output of descriptive statistics like standard deviations, frequencies, mean and coefficient of variation. Cheptoo (2006) who studied factors that influence the choice and success of equity rights issue in Kenyan market and also employed descriptive statistics. She employed graphs and tables for her analysis. She categorized them into percentage and ranked them from the highest to the lowest. The new angle brought about by this study was the aspect of signaling effect. This was important in order to establish the influence of signaling effect and compare it with other determinants which have been discussed by the previous studies. The approach adopted by this study was descriptive statistics in order to evaluate extensively the mean and standard deviations from the primary data. The weighting of the determinants was also important factor adopted in order to rank the determinants for comparison purposes. The regression methods for the data analysis was adopted for the secondary data to assist in evaluating the relationship between the level of subscription and the determinants of rights issue performance. In order to enhance the validity of the study, data triangulation was adopted by using both primary and secondary data as this was thought very helpful to add authority to the findings of the study.

2.6. Summary of Literature Review

The review discussed the existing literature in the field of rights issue. The finding of different studies was also been analyzed. The basic models have been discussed alongside various determinants. This was necessary to elaborate the trend and appreciate the findings of different researchers in the field of rights issue. The next chapter will highlight the Methodology that the study has adopted in data collection and analysis.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Kothari (2004) defines research methodology as systematic way of finding solution to research problem. This chapter provides an elaboration of the research methodology that was adopted in this study, an illustration of the research design, sample and sampling methods, population of interest, methods of collection of data adopted as well as data analysis and presentation techniques used in the study.

3.2 Research Philosophy

The study sought to adopt a positivism philosophical approach as the research strategy. Susweta (2018) define positivism research philosophy as a research strategy, which entails developing hypothesis and collection of data. The data are analyzed, the hypothesis tested and the result is confirmed in order to develop a theory. This strategy is also defined by its highly methodical structure, which is systematic, and flows from problem definition, review of literature, data collection, analysis, and reporting. This strategy is ideal for this study since it is quantitative research with statistical observations. Furthermore, this study is anchored on previous theories like the pecking order theory, the asymmetric information and signaling theory, which guides the research impetus of establishing signaling as a determinant of rights issue performance of the firms listed at the NSE. This approach enhances rigour and quality of the study.

3.3 Research Design

Rajendra (2008) define research design as a way of organizing conditions and linkages in the collection of data and analysis by deploying techniques with aim of showing the reliance of the research. Research design provides a framework upon which the research is carried. This study adopted explanatory research design because of its approach on addressing the causal explanation, (Blumberg, Cooper and Schindler 2008, Gay1981).

The study sought to establish signaling as a determinant of right issue performance at the NSE.

3.4 Population

Population is defined as the total sum of all elements upon which the study of interest is based (Cooper and Schindler, 2009). The study adopted the population comprising of companies listed at the Nairobi Securities Exchanges for the period 2000 to 2018. There are 65 companies listed at the NSE and the 24 listed trading participants at the NSE. This resulted to a population of 89. In order to abide by the provided rules of the regulators, companies listed are required to make public any material information that would be of interest to any stakeholder and also seeks the approval of the regulator before allowing the rights issue (Firer, Ross & Westerfield, 2012). Managers from the 89 firms were targeted and given questionnaires for primary data. However, for secondary data, the study used data from the 32 firms which had participated in the rights issue for the period under review and have their data available at the Capital Market Authority website and their respective companies' websites.

3.5. Sampling Design

3.5.1 Sampling Frame

Sampling frame is defined as a composition of all the elements from which the sample is drawn (Bloomberg et al. (2008). The study adopted purposive sampling in order to get only the companies of interest. For the secondary data, the study sample consisted of thirty-two firms that participated in the rights issue at the NSE during the period 2000 to 2018 (CMA Handbook). For the primary data, eighty-nine firms comprising all listed firms at the NSE and the listed trading participants at the NSE were adopted.

3.6 Data Collection

Data collection is defined as a procedure of collecting and measuring variables of interest in a framework that allows one to respond to the set research questions and address the research objectives, Whitney, Lind and Wahl (1998). The study used secondary data mainly the financial statements, rights issue information memoranda, management reports, periodical journals and bulletins from the CMA and the NSE. This provided data mostly for the first specific objective of assessing the debt servicing capability of the listed firms at the NSE and the fourth specific objective of the determinants of rights issue performance at the NSE. Secondary data was considered reliable since the financial statements are subjected to audit scrutiny and therefore must be factual. In establishing the signaling effect as per the first and second specific objectives, the study used primary data. For the first specific objective of debt servicing capability, the study used net average of the financial statements for the rights issue. This data was drawn mainly from NSE reports and also from the CMA reports as well as the company's websites.

To supplement this, the study further adopted primary data in order to respond to the specific objectives two and three of assessing the management perception regarding the signaling effect and the determinants of rights issue performance. This was done by administering questionnaires. The questionnaires targeted management staff of the listed firms at the NSE and the listed participating firms. The targeted were those who had got some relevant understanding about the financial knowledge and know-how of the rights issue. The questions entailed both closed-ended to inquire on specific areas of interest to the research and open-ended for additional information required. In addressing the specific objective two of establishing the signal interpreted by the equity investors regarding the financial soundness of the rights issuing firms at the NSE, the study distributed the questionnaires to the fund managers or brokers who normally act on behalf of the investors whenever they are undertaking rights issue.

To enhance accuracy and completeness of data, data collection guide was used. Five-point Likert-Scale ranging from 1 to 5 was used to provide the frame work of significance for every point. Personal information was avoided and coding of information was used in order to protect identities of respondents and to observe ethical practices of research. Data collection related to all the firms selected as sample for the given period indicated in the study. In this regard, the study adopted cross-sectional data approach.

3.7 Data Analysis

Data analysis is described by Saunders et al. (2009) as a way of applying statistical tools systematically aiming at processing data into information that is meaningful. The study adopted both the quantitative data mostly from the financial statement and the qualitative data which were from the reports and also from the questionnaires. The data analysis was organized based on the specific objectives where the first specific objective of debt servicing capability of the rights issuing firms was analyzed using the descriptive statistics, the second and third specific objectives of establishing the signaling effect of the announcement of rights issuing firms was analyzed using descriptive statistics where the means and standard deviation were calculated and evaluated. Weighting was also calculated in order to assign the order of significance or influence. The fourth specific objective of establishing other determinants of rights issue performance was established using the multiple regression model below:

$$\mathbf{Y} = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + B_7X_7 + B_8X_8 + B_9X_9 + B_{10}X_{10} + B_{11}X_{11} + B_{12}X_{12} + \sum$$

Where:

Y = Rights issue performance (The Subscription level)

$\mathbf{B_0}$= Constant

$\mathbf{B_n}$=Coefficient of independent variable.

$\mathbf{X_1}$ = Retention of Control & Ownership

$\mathbf{X_2}$ = Flotation Cost

$\mathbf{X_3}$ = Market Share

$\mathbf{X_4}$ **=** Age of the Firm

$\mathbf{X_5}$ = Cost of Underwriting

$\mathbf{X_6}$ = Profitability of the firm

$\mathbf{X_7}$ = Reason for Raising the Funds

$\mathbf{X_8}$ = Expensiveness of offer price/Discount

$\mathbf{X_9}$ = Offer size

$\mathbf{X_{10}}$ = Cash flow

$\mathbf{X_{11}}$= Signaling effect

3.8 Diagnostic Test

The study undertook diagnostic test in order to establish whether the data were parametric making them suitable for the regression analysis, or they were non-parametric and hence not suitable for regression analysis. The following test were conducted:

3.8.1 Multi-Collinearity

Multi-collinearity test was conducted in order to test for any presence of variance which might have been overstated. It was tested using variance inflation factor (VIF). Its presence is shown whenever the VIF is above 5 and therefore the further it moves away from 5 the stronger the presence of multi-collinearity (Cater & Lee, 2001).

3.8.2 Serial Correlation

The study also carried out test for auto correlation in order to establish whether the error terms were independent from one another i.e they were zero. The test was intended to establish whether an error that occurred in one period was transferred to the next period, (Kothari, 2004). The Pearson correlation test was used in the study.

3.8.3 Normality Test.

The study also carried out a normality test in order to establish whether the data set was from a normal distribution representing the entire population, (Kothari, 2004). Kolmogorov and Shapiro Wilk Tests of SPSS were used in the study.

3.8.4. Heteroscedasticity Test

The study also sought to establish whether there was a constant variance from the data sample chosen as inconsistent variance may lead to invalidation of the significance test of the data, (Kothari, 2004). The F-test was conducted in order to establish any presence of heteroscedasticity.

3.9 Quality of the Research

Research quality is defined as the scientific process which ensures that all prerequisite elements of the research study are adhered to, (Kothari, 2004). This includes matching the study objectives, the research questions and the relevant literature reviews and well as the methodologies of the study adopted. It ensures mitigation against systematic and non-systematic biases. To achieve this, the study paid attention to ensuring that there was relevant chronology of events from the back ground through the research objectives, review of literature all through methodology, data analysis and finding and recommendations of the study.

3.9 Research Ethical Issues

Research Ethics refers to standards of conducts guiding the moral choices about behaviours and relationships among the people. In research, it serves to ensure that quality of research is not compromised and all parties involved do not suffer any consequences arising from any role they might have played in the process. To ensure this was achieved, the study adopted a professional approach in data collection by avoiding seeking any personal sensitive information from the respondents, seeking permission from relevant authorities like (Strathmore University-Institutional Ethical Review Committee (SU-IERC) and NACOSTI before acquiring information and appropriately acknowledging any information taken from third parties through appropriate citations. Study also embraced voluntary participation.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter provides a detailed analysis of both primary data and the secondary data collected. Primary data were divided into two: for firm managers and fund managers. From the firm managers the target was to seek information from those who advices the organization on financial matters which includes debt servicing capability of the firms, perception of management regarding the financial literacy and the expectations of equity investors as well as other determinants of rights issue performance. From fund managers, the targeted information was in regard to the signal interpreted by equity investors as far as financial soundness of the rights issuing firms were concerned and the determinants of rights issue performance at the NSE.

4.2 Response Rate

In order to establish signaling effect as evaluated using the specific objectives two and three, eighty-nine questionnaires were distributed. Sixty-five were distributed to listed firms at the NSE while twenty-four were distributed to listed trading participants at the NSE. Considering the possible mobility of staffs from one institution to the other and from one trading participant to the other, the entire population was considered. Fifty-two questionnaires were filled and returned. This translated to 62.9% and was considered sufficient to proceed with the analysis. In regard to the secondary data meant for specific objective one and four, data was expected from thirty-two firms that had participated in the rights issue for the period under review, however, only thirty-one firms were able to provide complete data for objective one of debt servicing capability. This translated to 96.8% which was considered sufficient for the analysis to proceed. For the fourth objective, complete data was available from twenty firms which translated to 62.6% and was considered sufficient too for the study.

4.3. Firm Profiles (Primary Data)

The output of the firm profile is summarized in appendix IV. The gender of respondents were males 46% and 53% females. In regards to their age (26-30 =39%, 31-35=29%). These were among the highest, implying that majority of the respondents were youths while in regard to their level of education, among the highest were 58% -Undergraduates and 21%-Masters. Therefore, majority were well knowledgeable. In regard to their positions in the organization among the highest were 48%-Assistants and 31%-Managerial). Concerning the sectors of the market, among the highest were (Banking-26%, Commercial & Services-16%, Consulting-13%). However, there was representation almost across all the sectors as represented at the NSE. In regard to private or public,87%-Private & 13%-Public. Based on the above, it can be concluded that the information was reliable and can be used for decision-making. The summary is given in appendix IV for detailed analysis.

4.4 Diagnostic Tests

Based on the assumptions of the OLS estimations which should hold whenever a linear regression model is used, the study conducted diagnostic tests in order to establish these assumptions.

4.4.1 Test for Serial Correlation

The study conducted autocorrelation test in order to establish whether the covariant between the error term is zero or not. Breuche Godfrey correlation test was carried out as shown in the table 4.1. The test was guided by the decision criteria such that if P-value > .05, then the null hypothesis cannot be rejected.

Where: $H_{O:}$ There is no auto correlation.

Table 4. 1:Serial Correlation

Breusch-Godfrey Serial Correlation LM Test:

Null hypothesis: No serial correlation at up to 4 lags

F-statistic	0.759821	Prob. F(4,1)	0.6848
Obs*R-squared	15.04863	Prob. Chi-Square(4)	0.0046

Source: Researcher Analysis (2019).

From the correlation output on table 4.1, The P-values is less than 0.05 for 4 lags while the F value is greater than 0.05 for both lag 1 and 4. This indicated the existence of partial correlation. This was not considered too serious of a risk since the F-value was greater than 0.05. The study therefore proceeded with the regression analysis.

4.4.2 Test for Multicollinearity

The test for multicollinearity was conducted in order to estimate the value of variance that might have been inflated. The study used the variance inflation factor (VIF). The VIF value of more than 10 is an indication that the variance is inflated. (Cater & Lee,2001). The summary of the result is shown in table 4.2

Table 4. 2: Multicollinearity Results.

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Offer Size	.582	1.719
	Control & Ownership	.189	5.282
	Flotation Cost	.792	1.262
	Market Share	.347	2.881
	Age of the firm	.533	1.876
	Underwriting cost	.156	6.394
	Reason for funding	.420	2.378
	Discount	.459	2.178
	ROA	.420	2.380
	ROE	.267	3.748
	Net income	.357	2.800
	Cash flow	.651	1.537

a. Dependent Variable: Level of subscription

From the model output, the VIF values are less 10, implying that multicollinearity is absent.

4.4.3 Test for Normality

The data set was also tested for normality in order to establish whether the data sample was drawn from a normal population. The study used the Kolmogorov and Shapiro Wilk Tests in SPSS. For the normality condition to prevail, the data set should have P-values >0.05. The study output indicated in the appendix V that 8 out of 11 variables were normally distributed as shown in the output while three of were not and regarded as outlier. Since 8 translated to 72.3%, this was considered significant and the remaining were regarded are outliers. Hence the condition was met and the study proceeded with the regression.

4.*4*.4. Test for Heteroscedasticity

It was also necessary to test whether error term was homogeneous or heterogeneous considering that the variables used were from the 5-year period before the rights offer. The output from the test is shown in table 4.3.

Table 4. 3 Heteroscedasticity Test

Heteroskedasticity Test: White
Null hypothesis: Homoskedasticity

F-statistic	0.163863	Prob. F(14,13)	0.9991
Obs*R-squared	4.199937	Prob. Chi-Square(14)	0.9941
Scaled explained SS	5.604078	Prob. Chi-Square(14)	0.9755

Source*: Researcher Analysis: 2019.*

From the result, the P-value was not significant, i.e. 0.9755 > 0.05 confidence level and hence the data was homoscedastic i.e. has no problem of heteroscedasticity.

4.5 Results Findings for Objective I

This objective was meant to illustrate whether the firms participating in the rights issue have debt servicing problems which could be revealed by the study. The variables include the average of net changes in cash and cash equivalents for the five years period preceding the rights issue, the average of net income, the averages of return on asset (ROA) and the return on equity (ROE). The analysis was divided into two categories which included: (1). All the firms that had participated in the rights issue. (2). The firms with any negative signs in any of the above four variables. All the variables were converted into ratios for convenient analysis.

Table 4. 4: Descriptive Statistics of Debt Servicing Capability.

a) Profitability of all the listed firms at the NSE

		ROA	ROE	Net income	Cash flow
N	Valid	20	20	20	20
	Missing	0	0	0	0
Mean		.036000	.142000	1.783908	2.182768
Median		.030000	.130000	1.725002	.087907
Mode		.0300	.0700	-.3740(a)	-3.6078(a)
Std. Deviation		.0369067	.1021660	1.6518393	6.1454617
Minimum		-.0100	-.0900	-.3740	-3.6078
Maximum		.1600	.3400	4.8942	24.4212

b) Profitability of Financial Distressed Firms at the NSE.

		ROA	ROE	Net income	Cash flow
N	Valid	9	9	9	9
	Missing	0	0	0	0
Mean		.047778	.137778	1.966664	-.594436
Median		.030000	.120000	1.503754	-.557841
Mode		.0300(a)	-.0900(a)	-.3740(a)	-3.6078(a)
Std. Deviation		.0533333	.1348868	2.0227756	1.5533214

From the descriptive output in table 4.4, the mean for all the four variables were positive. Being average for the five-years period, the outcome was a sign that the debt servicing capability of these firms did not show any alarming sign which could imply that rights issue was due to problems related to profitability. However, when the analysis was limited to only the firms with financial distress (Those which had shown any negative signs), cash flow showed a negative mean as indicated in table 4.4(b). This is a sign of liquidity difficulties for the distressed firm hence likelihood of debt servicing problem.

4.6 Results Findings for Objective II and III

In order to establish the signal interpreted by the equity investors in regard to the financial soundness of the firm whenever the rights issues are declared, the study adopted a systematic chronology of evaluation. This was done by evaluating the financial literacy of the equity investors first, then the understanding equity investors of the signal sent by firms, followed by establishing whether equity investors pay attention to the financial soundness of the firms and the influence of signaling effect on the rights issue performance at the NSE. These objectives were building on to answering the question of signaling as a determinant of rights issue performance at the NSE. Therefore, a total of four closely related variables were analyzed based on the respondents interviewed. Table 4.5 provides the summary of the output:

Table 4. 5: Result of objective II and III from the Primary Data.

The variables	Mean	Standard Deviation	Ranking based on the Weight
Financial Literacy of Equity Investors	3.38	1.105	1
Equity investors understanding the signal send	3.02	0.918	4
Equity investors paying attention to financial soundness of the firm	3.12	0.943	2
The influence of signaling effect	3.44	0.826	3

The output indicated that with regard to financial literacy, there was a mean of 3.38 with a standard deviation of 1.105. This implied that the equity investors have more than average knowledge to make a viable financial decision in regard to rights issue. In regard to the signal sent, the mean was 3.02 and a standard deviation of 0.918, implying that more than average of the equity investors are able to interpret the signals sent by firms whenever the rights issue is declared. In regard to paying attention to the financial soundness of the firm, the mean was 3.12 implying that more than average of the investors pay attention to the financial soundness of the firms. In regard to influence of the signaling effect, the mean was 3.44 and the standard deviation of 0.826 implying that signaling effects is believed to influence the rights performance at the NSE. From the analysis, it can be concluded that the signaling effect is a determinant of rights issue performance at the NSE.

4.7 Results Findings of Objective IV

This objective was intended to establish other determinants of rights issue performance at the NSE and to illustrate the influence of signaling as determinant relative to the other determinants. The primary questionnaires were administered to the firm managers of all the 65 listed firms at the NSE and the 24 listed trading participants at the NSE.

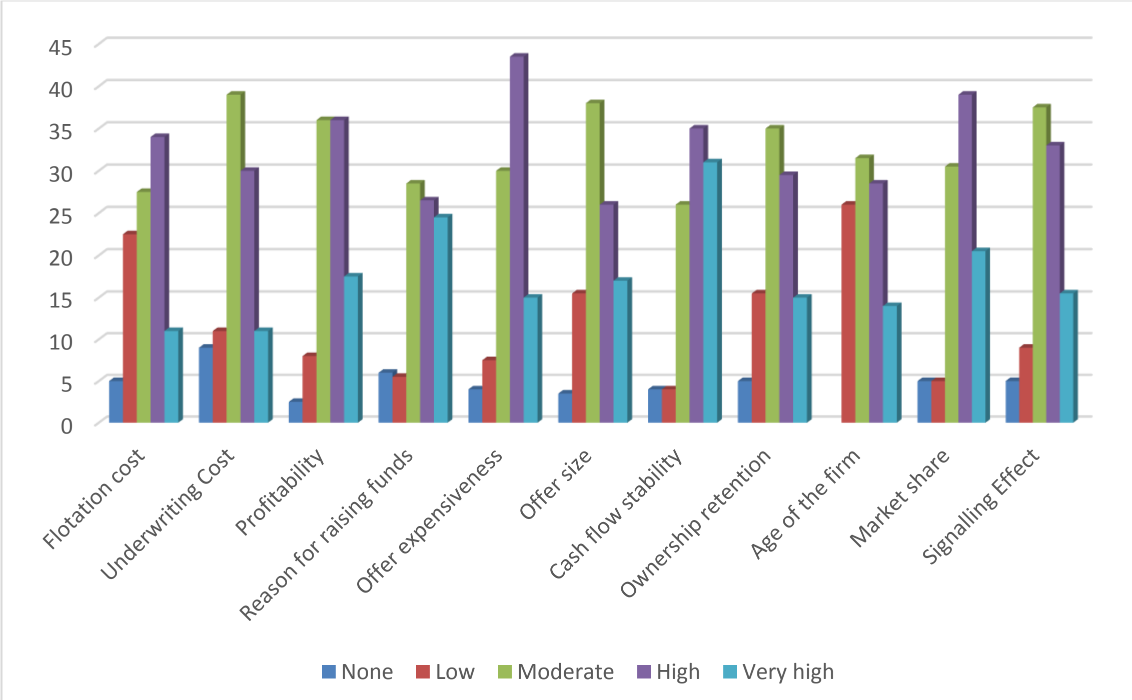

Figure 4. 1: Determinants of Rights Issue (Primary Data)

From the findings, on average cash flow stability is highly considered by the equity investors followed by the market share of the firm, profitability in that order while the underwriting cost and flotation cost were least considered. On individual variables, further analysis indicated that cash flow, market share, flotation cost and discount were considered mostly to a high extent while underwriting cost, offer size, ownership retention, age of the firm, signaling effect and reason for raising funds were considered mostly to a moderate extent. Profitability was the only variable mostly considered to a high and moderate extent equally.

4.8 Results Findings of Objective IV

The study envisaged triangulation in order to give more weight to the study findings. In that regard secondary data were also collected from the 32 firms which had participated in the rights issue for the period under review. There was a major challenge in accessing the data for the entire period due to storage challenge by most organizations, hence, the study was able to acquire complete information from 20 firms only. Since this comprised 62.5% of the entire target, it was considered sufficient to proceed with the regression analysis. Diagnostic tests were conducted first to establish the suitability the variables for regression proceed.

4.8.1 Regression Output

When regression was conducted, the output indicated that when all the determinants are zero, the level of subscription is 4.329. Unit increase in most of the determinants when other factors are held constants result in decrease in the level of subscription except an increase in market share, profitability and cash flow that resulted to increase in level of subscription. The P-value was 0.356 which was insignificant since it was greater than the 0.05 confidence level. Therefore, the variables were reduced to only those which proved significant and were only two. i.e. cash flow and ROE. Table 4.6 show the summary of the result.

Table 4. 6: Regression of Reduced Variables.

(a) Model Summary-For Cash flow and ROE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.779(a)	.606	.466	.7022777

a. Predictors: (Constant), Cash flow, ROE

(b) ANOVA- For Cash flow and ROE

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.235	2	4.618	9.456	.002(a)
	Residual	8.302	17	.488		
	Total	17.537	19			

a Dependent Variable: Level of subscription

(c) Coefficients for Regression of all the Variables.

Model		Unstandardized Coefficients		Sig.
		B	Std. Error	
1	(Constant)	4.329	4.708	.388
	Offer Size	-.001	.001	.228
	Control & Ownership	-1.384	4.613	.773
	Flotation Cost	-1.475	2.011	.487
	Market Share	.003	1.517	.998
	Age of the firm	-.783	1.068	.487
	Underwriting cost	-2.671	10.151	.800
	Reason for funding	-.146	.227	.541
	Discount	-2.951	3.403	.415
	ROA	-4.529	8.334	.604
	ROE	2.946	1.06.	.084
	Cash flow	0.093	.592	.003

a Dependent Variable: Level of subscription

Source: Researcher Analysis:2019.

From the table 4.6, the findings indicated that : (i) the adjusted R square was 46.6% which implying that the independent variables were able to explain up to 46.6% of the dependent variable (rights issue performance), (ii) ANOVA results indicated a p-value of 0.002 which was less than 0.05 level of significance implying that the independent variables were jointly significant in predicting rights issue performance(iii) the regression coefficient results indicated that cash flow was the only determinant that had significant and positive influence on the rights issue performance, i.e. increase in cash flows was associated with increase in rights issue performance

4.7 Chapter Summary

The chapter explained how data was analyzed in order to establish the research objectives. The first specific objective one was to examine the debt servicing capability of the rights issuing firms at the NSE. Descriptive analysis was conducted in order to establish their means. The specific objective two and three were also analyzed using the descriptive statistics but were analyzed together due to their close relationship. Ranking was done based on their means.

The first specific objective indicated that when only distressed firms are included, cash flow was negative implying that financially distressed firms were facing liquidity problem hence may not able to service their debt regularly. This might justify their decision to use rights issue. The fourth specific objective was evaluated using the regression analysis. However, different diagnostic tests were conducted prior in order to establish the suitability of the variables for regression analysis. The first model established that when all of the variables were included, it resulted to an output with a P-value greater than 0.05 hence was insignificant while an increase in any of the variables results to a decrease in the level of subscription.

However, when the model was reduced to two variables of cash flow and ROE, it resulted to P-value of 0.002 which is less than 0.05 hence significant and an increase in any of the coefficient variables resulted to positive increase in the level of subscription. This was adopted as the appropriate model. It is therefore advisable to managements of the rights issuing firms that they should focus majorly on two variables of cash flow and ROE instead of all of the variables in order to optimize the level of subscription during the rights issue. It can also be concluded that based on the primary data, signaling should be considered as a determinant of rights issue. Furthermore, the analysis of the secondary data and the primary data resulted to a consistence feedback as far as signaling theory is concerned i.e. cash flow are significantly influential to rights issue performance.

CHAPTER FIVE

DISCUSSION, SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes and winds up the findings of the study. The specific objectives of the study were to analyze the debt servicing capability, examine the signal interpreted by equity investors regarding financial soundness of the rights issuing firms at the NSE, examine the perception of management of rights issuing firms regarding the financial literacy of equity investors at the NSE and examine other determinants of rights issuing performance at the NSE.

5.2. Discussions and Findings.

This section elaborates on the findings of the study according to each objective.

5.2.1The Debt Servicing Capability

The analysis was conducted based on data collected from financial statements of the 32 listed firms at the NSE, which had participated in the rights issue. Descriptive statistics was conducted and mean and standard deviations were evaluated. The findings based on the overall mean output for all the firms that participated in the rights issue indicated that the firms participating in the rights issue have financial capability to service their loans. However, when analysis was limited to only those firms with at least one negative variable in any of the four elements of profitability, it emerged that financially distressed firms are facing liquidity problems and therefore may not be able to service their debts regularly as might be expected. This might be a reason for choosing rights issue as a way raising capital.

In reference to Pecking Order theory (Myers and Majluf, 1984) which stated that firms have definite order of preference when it comes to raising capital. Their claim that firms consider retained earnings first followed by debt then finally equity due to the cost of using them seem to be supported by findings of this study. This is because even though debt is considered cheap and should be an option before resorting to equity, but distressed firms are unable to service debt regularly due to their liquidity problems. Therefore, firms facing liquidity challenge are likely to use rights issue, which does not have restrictive conditions to them. The findings were also in consonance with those of (Lydia, 2014) that cash flow and profitability were among the major determinants of the rights issue.

5.2.2. Signal Interpretation by Equity Investors

In regard to financial literacy, 40% of the respondents believed that equity investors are knowledgeable in financial literacy to a moderate extent. The result indicated that more than a half of the respondents believed that equity investors have financial literacy. From the data output it can be concluded that the equity investors are able to understand the financial soundness of the right issuing firms. It could be possible that equity investors might be acting on their own or seek the services of financial professionals when making such decision. Either way, they are armed with the basic knowledge of financial literacy which guide them on the kind of relevant information to look for or where to get the relevant assistant that enables them to make timely and relevant decision.

5.2.3 Equity Investors Understanding the Signal Send by Firms

The output of the data showed that 40% of the respondents believed to moderate extent that equity investors understand the signal sent by the firms when they declare rights issue. The likely signal arising from the rights issue is that the firms do not have enough financial reserves which they can use to funds their expansions, investments, service their debts or to recapitalize.

5.2.4 Financial Soundness of the Firms

The study showed that 57.7% of the respondents believed to moderate extent that equity investors pay attention to financial soundness of their firms before participate in the rights issue. While evaluating the financial soundness of the firm might not be so easy for non-expert to establish, from the study in can be concluded that the equity investors are able to pay attention to basic signs of financial soundness before they make a decision to participate in the rights issue.

5.2.5 Influence of Signaling Effect in Performance of Rights Issue

Concerning signaling effect influencing rights issue performance, 42.3% believed to a moderate extent that signaling effect influences rights issue performance. However, 40% of the respondents also believe to a higher extent that signaling effect influences rights issue performance. When considered among other determinants of rights issue, signaling effect was ranked fourth. This showed that it had impact on the performance of rights issue.

In comparing all the four aspects together, financial literacy was ranked first as the most important aspect followed by equity investors paying attention to the financial soundness of the firm. Influence of signaling effect in the rights issue performance was third while equity investors being cognizant of the signal send by firms was ranked 4th. From the analysis, it can be concluded that investors are quite informed when it comes to investing their funds, and they tend to make decision based on relevant information. Furthermore, the signaling has been shown as one of the determinants of rights issue and management of firms may use this to optimize the level of subscription of rights issue.

5.2.6. Other Determinants of Rights Issue Performance.

In establishing other determinants of rights issue performance, descriptive statistics was used and eleven variables were evaluated based on finding of previous studies. The findings indicated that the equity investors pay much attention to the financial health of their firms and the returns they get from committing their funds hence supporting the concept of wealth maximization. This is because by focusing on the cash flow stability, the profitability and the discount they earn by participating in the rights issue among other variables, it only serve to justify that they are maximizing their wealth.

The findings in both the secondary data and primary data were consistent in regards to the signaling theory. Their result pointed out that cash flows are significantly influential to rights issue performance implying that equity investors respond positively to rights issue if cash flow of the company is increasing. These findings were in consonance with the findings of Lydia (2014) whose findings also placed firm’s profitability among the top influencers of rights issue performance. The above findings concur with the signaling theory that an increase in cashflow and ROE results to an increase in the rights issue take up by the equity investors.

5.3 Conclusion

From the finding of the study, it can be concluded that shareholders are knowledgeable about the financial literacy and pays much attention to financial soundness of their firms before they make decisions to participate in the rights issue. The study also established that based on the knowledge of the investors when making decisions, there is signaling effect on their decision that influence the performance of the rights issue.

In regard to determinants of rights issue, based on the primary data, the cash flow, market share, profitability and offer expensiveness are among the top key determinants of rights issue performance at the NSE. It is also advisable to the management that focusing on all the determinants results to decline in the level of subscription. Therefore, they should only pay more attention to cash flow and ROE that proved significant and resulted to an increase in the level of subscriptions. Nevertheless, of great significant is cash flow since equity investors responds positively to rights issue if cash flows of the company are increasing.

5.4 Recommendation

From the study findings, it can be recommended to the equity investors that financially distressed firms have shown an indication of having liquidity problems therefore this might be one of the reasons for raising funds using the rights issue hence they should focus more in establishing the liquidity and profitability of these firms before making their decisions. Management of rights issuing firms should pay much attention to the cash flow and profitability as determinants of rights issue performance since the two seem to be of interest to the investors most. Furthermore, this might be as result of cash flow not being easily distorted and the equity investors being financially literate about their firm’s performance hence they knows the relevant information to look for whenever there is rights issue. From the regression analysis of the determinants of rights issue, the study recommends further analysis in order to establish an optimal linear relationship between the level of subscription and various determinants of rights issue performance by increasing other variables that were not captured in this study as well as signaling effect with a viable quantitative measure.

Further study could be conducted to establish all the determinants of rights issue including the signaling effect and regressed in order to establish the optimal level of each one of them. This may be extended to a longer period with the updated data in order to evaluate whether it will give similar result.

5.5. Limitations

In establishing other determinants of rights issue, the study was not able to access secondary data from twelve organizations out of the intended thirty-two. This resulted to use of data from twenty companies. Even though, this resulted to 62.5% of the total population and was still significant, but may be getting 90% of the data could have resulted to different result from the regression. Another limitation of the study was that the signaling effect could not have been measured quantitatively and therefore was not included among the regression variables for objective four.

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Appendices

Appendix I. Letter of Introduction

20th February 2019

TO WHOM IT MAY CONCERN.

RE: SIGNALING AS A DETERMINANT OF RIGHTS ISSUE PERFORMANCE IN NAIROBI SECURITIES EXCHANGE

The above subject matter refers

In partial fulfilment of the Master Degree program, Mr. Godfrey Jelah is required to conduct a study on a contemporary subject within his areas of specialization which involve collection of data. His study is entitled:

Signaling as a Determinant of Rights Issue Performance in Nairobi Securities Exchange

His research objectives comprised of:

1. To test the applicability of the signaling theory in rights issue at the NSE
2. To examine the determinants of rights issue performance in the NSE
3. To assess the management perceptions regarding the determinants of rights issue performance in the NSE

In enhancing the credibility of the study, first-hand information is required for the primary data and that is where your input is very crucial. You are therefore kindly requested to spare a few minutes of your precious time to fill the questionnaire appropriately to enable Mr. Godfrey to complete his project. Based on the available timelines for the study you are requested to respond to the questionnaires within the shortest time possible, 5days utmost.

Please note that the study is purely meant for academic purposes and all the information provided will be treated with utmost confidentiality. Ethical principal will be observed all through the process and no reference will be made to any individual or organization.

Based on the nature and importance of the information required, you are requested to allow only senior members of your staffs who are conversant with the strategic decision of your organization to respond to the questionnaire.

Your cooperation and timely responses will be highly appreciated.

Faithfully Yours

Prof. David Wangombe
Dean, Faculty of Commerce.

Appendix II: Questionnaire (1)-For the Fund Managers/Brokers

SURVEY ON SIGNALING AS A DETERMINANT OF RIGHTS ISSUE PERFORMANCE IN NAIROBI SECURITIES EXCHANGE.

INTRODUCTION

The research study is aimed at bridging knowledge gap that exist in the signaling effect of the announcement of the rights issue. It is also set to establish the underpinning determinants of rights issue performance at the NSE.

Kindly spare a few of your precious minutes to respond to the questions. Your responses will be treated with utmost confidentiality.

The Questionnaire is divided into two parts. Kindly respond to all the sections.

Part one

This section is intended to capture the personal details of the respondents. Please tick appropriately as applicable.

1. Name

……………………………………………………………………………(Optional)

2. What is your Gender? (Optional)

Male ( )

Female ( )

Others ( )

3. What is your age bracket?

18-20 Yrs ( )

21-25 Yrs ( )

26-30 Yrs ( )

31-35 Yrs ( )

36-40 Yrs ( )

41-45 Yrs ( )

46-50 yrs ( )

Above 51 Yrs ( )

4. What is your highest level of academic qualification?

Diploma ( )

Undergraduate degree ( )

Post graduate diploma ( )

Masters ( )

Doctorate Degree ( )

Others, (Kindly Specify) ……………………………

5. Which on the following best describe your position?

Supporting Staff Level ( )

Assistant Level ( )

Managerial Level ( )

Senior Managerial Level ( )

Assistant Head of Department Level ( )

Head of Department Level ( )

Assistant CEO/Director Level ( )

CEO/Director Level ( )

Others, (Kindly Specify) …………………………….

6. Which sector does your organization fall under?

Agriculture ( )

Auto mobile and Accessories ( )

Banking ( )

Commercial and Services ( )

Construction and Allied ( )

Energy and Petroleum ( )

Insurance ( )

Investment ( )

Manufacturing and Allied ( )

Telecommunication and Technology ( )

Others, (Kindly Specify) ……………………………

7. In which Category does your organization fall?

Public Institution ( )

Private Institution ( )

8. In which Department are you working in?

Procurement ( )

Finance/ Accounting ( )

Internal Audit ( )

Human Resource ( )

Administration ( )

Sales and Marketing ( )

Others, (Kindly Specify) ……………………………

Part Two.

This section identifies the determinants of rights issue performance at the NSE and the signaling effect of rights issue announcement.

Indicate your rating by ticking appropriately.

1=No extent

2=Low extent

3=Moderate extent

4=High extent

5=Very high extent

				1	2	3	4	5
1	**Financial Perspective**	Flotation Cost	To which extent do you feel that the floatation cost is a determinant of rights issue performance in your organization?					
2			To which extent do you feel that the floatation cost influences the rights issue performance in your organization?					
3		Cost of underwriting	To which extent do you feel that the cost of underwriting is a determinant of rights issue performance in your organization?					
4			To which extent do you feel that the cost of underwriting influences the rights issue performance in your organization?					
5		Profitability	To which extent do you feel that the profitability is a determinant of rights issue performance in your organization?					
6			To which extent do you feel that the profitability influences the rights issue performance in your organization?					
7		Reason for raising funds	To which extent do you feel that the reason for raising funds is a determinant of rights issue performance in your organization?					

			1	2	3	4	5
8		To which extent do you feel that the reason for raising funds influences the rights issue performance in your organization?					
9	Expensiveness of offer price.	To which extent do you feel that expensiveness of offer price is a determinant of rights issue performance in your organization?					
10		To which extent do you feel that expensiveness of offer price influences the rights issue performance in your organization?					
11	Offer size	To which extent do you feel that the offer size is a determinant of rights issue performance in your organization?					
12		To which extent do you feel that the offer size influences the rights issue performance in your organization?					
13	Cash flow stability	To which extent do you feel that the cash flow stability is a determinant of rights issue performance in your organization?					
14		To which extent do you feel that cash flow stability influences the rights issue performance in your organization?					

				1	2	3	4	5
15	**Firm Perspective**	Retention of ownership	To which extent do you feel that the retention of ownership is a determinant of rights issue performance in your organization?					
16			To which extent do you feel that retention of ownership influences the rights issue performance in your organization?					
17		Age of the firm	To which extent do you feel that the age of the firm is a determinant of rights issue performance in your organization?					
18			To which extent do you feel that age of the firm influences the rights issue performance in your organization?					
19		Market share	To which extent do you feel that the market share is a determinant of rights issue performance in your organization?					
20			To which extent do you feel that the market share influences the rights issue performance in your organization?					
21	**Signaling Effect**	Signaling Effect	To which extent do you feel that the signaling effect is a determinant of rights issue performance in your organization?					
22			To which extent do you feel that the signaling					

		1	2	3	4	5
	effect influences the rights issue performance in your organization?					

Is there any other factor(s) you feel influences the rights issue performance but has been left out? Please specify……………………………………...………………………….

Thank you for your time and information given. It is much appreciated.

Appendix III: Questionnaire (1I)-For Firm Managers.

SURVEY ON SIGNALING AS A DETERMINANT OF RIGHTS ISSUE PERFORMANCE IN NAIROBI SECURITIES EXCHANGE.

INTRODUCTION

The research study is aimed at bridging knowledge gap that exist in the signaling effect of the announcement of the rights issue. It is also set to establish the underpinning determinants of rights issue performance at the NSE.

Kindly spare a few of your precious minutes to respond to the questions. Your responses will be treated with utmost confidentiality.

The Questionnaire is divided into two parts. Kindly respond to all the sections.

Part one

This section is intended to capture the personal details of the respondents. Please tick appropriately as applicable.

1. Name ………………………………………………………………………(Optional)

2. What is your Gender? (Optional)

Male [ ]

Female [ ]

Others [ ]

3. What is your age bracket?

18-20 Yrs [ ]

21-25 Yrs [ ]

26-30 Yrs [ ]

31-35 Yrs [ ]

36-40 Yrs [ ]

41-45 Yrs [ ]

46-50 yrs [ ]

Above 51 Yrs ( )

4. What is your highest level of academic qualification?

Diploma ( )

Undergraduate degree ( )

Post graduate diploma ( )

Masters ( )

Doctorate Degree ( )

Others, (Kindly Specify) ……………………………

5. Which on the following best describe your position?

Supporting Staff	Level	( )
Assistant	Level	( )
Managerial	Level	( )
Senior Managerial	Level	( )
Assistant Head of Department	Level	( )
Head of Department	Level	( )
Assistant CEO/Director	Level	( )
CEO/Director	Level	( )

Others, (Kindly Specify) …………………………….

Part Two.

This section identifies the determinants of rights issue performance at the NSE and the signaling effect of rights issue announcement.

Indicate your rating by ticking appropriately.

1=No extent

2=Low extent

3=Moderate extent

4=High extent

5=Very high extent

				1	2	3	4	5
1	**Financial Perspective**	Flotation Cost	To which extent do you feel that the floatation cost is a determinant of rights issue performance in your organization?					
2			To which extent do you feel that the floatation cost influences the rights issue performance in your organization?					
3		Cost of underwriting	To which extent do you feel that the cost of underwriting is a determinant of rights issue performance in your organization?					
4			To which extent do you feel that the cost of underwriting influences the rights issue performance in your organization?					
5		Profitability	To which extent do you feel that the profitability is a determinant of rights issue performance in your organization?					
6			To which extent do you feel that the profitability influences the rights issue performance in your organization?					

			1	2	3	4	5
7	Reason for raising funds	To which extent do you feel that the reason for raising funds is a determinant of rights issue performance in your organization?					
8		To which extent do you feel that the reason for raising funds influences the rights issue performance in your organization?					
9	Expensiveness of offer price.	To which extent do you feel that expensiveness of offer price is a determinant of rights issue performance in your organization?					
10		To which extent do you feel that expensiveness of offer price influences the rights issue performance in your organization?					
11	Offer size	To which extent do you feel that the offer size is a determinant of rights issue performance in your organization?					

				1	2	3	4	5
12			To which extent do you feel that the offer size influences the rights issue performance in your organization?					
13		Cash flow stability	To which extent do you feel that the cash flow stability is a determinant of rights issue performance in your organization?					
14			To which extent do you feel that cash flow stability influences the rights issue performance in your organization?					
15	**Firm Perspective**	Retention of ownership	To which extent do you feel that the retention of ownership is a determinant of rights issue performance in your organization?					
16			To which extent do you feel that retention of ownership influences the rights issue performance in your organization?					
17		Age of the firm	To which extent do you feel that the age of the					

				1	2	3	4	5
			firm is a determinant of rights issue performance in your organization?					
18			To which extent do you feel that age of the firm influences the rights issue performance in your organization?					
19		Market share	To which extent do you feel that the market share is a determinant of rights issue performance in your organization?					
20			To which extent do you feel that the market share influences the rights issue performance in your organization?					
21	**Signaling Effect**	Signaling Effect	To which extent do you feel that the signaling effect is a determinant of rights issue performance in your organization?					
22			To which extent do you feel that the signaling effect influences the rights issue performance in your organization?					
23			To what extent do you feel that equity investors					

		1	2	3	4	5
	are knowledgeable in regards to financial literacy of their investments?					
24	To what extent do you feel that equity investors do have high expectations in rights issue whenever they are announced in the NSE?					
25	To what extent do you feel that equity investors correctly understand the signal send by firms whenever the rights issue has been announced at the NSE?					
26	To what extent do you feel that equity investors pay attention to the financial soundness of the firms before they make decision to participate in the rights offering at the NSE?					

Is there any other factor(s) you feel influences the rights issue performance but has been left out?

If Yes, please specify:……………………………………………………………………….

Thank you for your time and information given. It is much appreciated

Appendix IV Firm Profiles

Characteristics	Options	Frequency	Percentage
Gender	Male	24	46%
	Female	28	53%
Age Bracket	18-20		
	21-25	8	15.5%
	26-30	20	39%
	31-35	15	29%
	36-40	8	15.5%
	41-45	1	1%
	46-50		
	Above 51 years		
Highest Level of Education	Diploma	4	8%
	Undergraduate	30	58%
	Post Graduate Diploma	7	13%
	Masters	11	21%
	Doctoral		
Position	Support Staff	5	10%
	Assistant	25	48%
	Managerial	16	31%
	Senior Managerial	2	4%
	Assistant HOD		
	HOD	1	1%
	Assistant CEO/Director		
	CEO/Director		

Characteristics	Options	Frequency	Percentage
	Others	3	6%
Sector	Agriculture	2	4%
	Automobile	1	1%
	Banking	13	26%
	Commercial & Services	8	16%
	Consulting	7	13%
	Construction & Allied		
	Energy & Petroleum	4	9%
	Insurance	7	13%
	Investment	5	10%
	Manufacturing & Allied	3	6%
	Telecommunication & Technology	1	1%
	Others	1	1%
Category	Private	7	13%
	Public	45	87%
Department	Finance/Accounting	29	57%
	Sales & Marketing	7	13%
	Others	7	13%
	Internal Audit	4	8%
	Administration	4	8%
	Procurement	1	1%

Appendix IV Normality Test.

Tests of Normality(b,c,d,e,f)

	Control & Ownership	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Level of subscription	1.0000	.215	15	.061	.833	15	.010

Tests of Normality(b,c,d,e)

	Flotation Cost	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Level of subscription	.0200	.190	7	.200(*)	.926	7	.513
	.0300	.260	2	.			
	.0400	.189	5	.200(*)	.980	5	.934
	.0500	.260	2				

Tests of Normality(b,c,d,e)

	Market Share	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Level of subscription	.0670	.200	3	.	.995	3	.861
	.1310	.188	3	.	.998	3	.913
	.2700	.260	2	.			
	.2720	.260	2	.			
	.3000	.247	4	.	.888	4	.373
	.8000	.260	2	.			

Tests of Normality(b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s)

	Age of the firm	Kolmogorov-Smirnov(a)		
		Statistic	df	Sig.
Level of subscription	.5000	.260	2	.

a Lilliefors Significance Correction

Tests of Normality(b,c)

	Underwriting cost	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Level of subscription	.0000	.165	18	.200(*)	.876	18	.022

Tests of Normality(b)

	Reason for funding	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Level of subscription	Expansion	.290	6	.125	.863	6	.200
	Investment & Expansion	.201	11	.200(*)	.901	11	.192
	Investment & Expansion & Debt	.260	2	.			

Tests of Normality(b,c,d)

	ROA	Kolmogorov-Smirnov(a) Statistic	Df	Sig.	Shapiro-Wilk Statistic	df	Sig.
Level of subscription	.0100	.260	2	.			
	.0200	.217	5	.200(*)	.877	5	.295
	.0300	.179	6	.200(*)	.959	6	.815
	.0400	.202	4	.	.973	4	.863

Tests of Normality(b,c,d,e,f,g,h,i,j)

	ROE	Kolmogorov-Smirnov(a) Statistic	Df	Sig.	Shapiro-Wilk Statistic	df	Sig.
Level of subscription	.0600	.260	2	.			
	.0700	.309	3	.	.900	3	.385
	.1200	.260	2	.			
	.2000	.260	2	.			
	.2400	.260	2	.			

Appendix V: Ethics Review Committee Approval.

Strathmore UNIVERSITY

17th May 2019

Godfrey Jelah
P.O.Box 42582-00100
Nairobi
godfreyjelah54@gmail.com

Dear Jelah,

REF Protocol ID: SU-IERC0391/19

THE SIGNALING EFFECT AND DETERMINANTS OF RIGHTS ISSUE PERFORMANCE IN NAIROBI SECURITY EXCHANGE

We acknowledge receipt of your application documents to the Strathmore University Institutional Ethics Review Committee (SU-IERC) which includes:

1. Study Protocol submitted 13th May 2019
2. Cover letter listing all submitted documents 13th May 2019
3. Proposal declaration page signed by supervisors 13th May 2019

The committee has reviewed your application, and your study "*The Signaling Effect and Determinants of Rights Issue Performance in Nairobi Security Exchange*" has been granted **approval**.

This approval is valid for one year beginning **17th May 2019** until **17th May 2020**

In case the study extends beyond one year, you are required to seek an extension of the Ethics approval prior to its expiry. You are required to submit any proposed changes to this proposal to SU-IERC for review and approval prior to implementation of any change.

SU-IERC should be notified when your study is complete.

Thank you

Sincerely,

for COt

STRATHMORE UNIVERSITY INSTITUTIONAL ETHICS REVIEW COMMITTEE (SU-IERC)
17 MAY 2019
TEL: +254 (0)703 034 000
P. O. Box 59857 - 00200
NAIROBI - KENYA

Prof Florence Oloo
Secretary
Strathmore University Institution Ethics Review Committee

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