

**DETERMINANTS OF INITIAL PUBLIC OFFERINGS TIMING IN
KENYA**

**BY
KAMAU MUONGI JOSEPH
D63/74207/2014**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF
MASTER OF SCIENCE IN FINANCE, SCHOOL OF BUSINESS,
UNIVERSITY OF NAIROBI**

NOVEMBER 2016

DECLARATION

This research project is my original work and has not been submitted for a degree in any other university or learning institute for academic credit.

Signed..... Date.....

Kamau Muongi Joseph

D63/74207/2014

I declared that this research is submitted with my approval as the supervisor at the University of Nairobi

Signed..... date.....

Dr. Josephat Lishenga

Supervisor

ACKNOWLEDGEMENT

I would like to pass my gratitude to all parties who made this project a success. I spread a special vote of thanks to my supervisor; Dr. Josephat Lishenga for his guidance throughout the project. I'd like to appreciate my parents Mr. and Mrs Kamau for their unwavering support and encouragement. I finally thank all my peers and respondents who willingly contributed information that facilitated the execution of this project.

DEDICATION

This work is dedicated to the body of knowledge that it may be a source of information to those seeking knowledge in this field.

I also dedicate this project to my mother Mrs. Chrispina Machayo for always being a source of motivation and encouragement in pursuing great heights of success.

TABLE OF CONTENTS

DECLARATION	ii
ACKNOWLEDGEMENT.....	iii
DEDICATION	iv
LIST OF TABLES.....	vii
ABBREVIATIONS.....	viii
ABSTRACT	ix
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the Study.....	1
1.1.1 Determinants of IPOs.....	2
1.1.2 Timing of Initial Public Offers	3
1.1.3 Determinants of IPOs Timing.....	3
1.1.4 Determinants of IPOs Timing in Kenya.....	4
1.2 Research Problem.....	4
1.3 Research Objective.....	5
1.4 Value of the Study.....	5
CHAPTER TWO	7
LITERATURE REVIEW	7
2.1 Introduction.....	7
2.2 Theoretical Framework.....	7
2.2.1 Life Cycle Theory	7
2.2.2 Market-Timing Theory.....	8
2.2.3 Pecking Order Theory.....	8
2.3 Empirical Studies.....	9
2.3.1 Determinants of IPO timing	9
2.4 Hot market Issues.....	10
2.5 Summary of Literature Review.....	11
2.5 Conceptual Framework	12
CHAPTER THREE.....	13
RESEARCH METHODOLOGY.....	13
3.1 Introduction.....	13
3.2 Research Design	13

3.3 Target Population	14
3.4 Sample Design.....	14
3.5 Data Collection.....	15
3.6 Data Reliability and Validity	15
3.7 Data analysis.....	16
CHAPTER FOUR.....	18
DATA ANALYSIS, FINDINGS AND INTERPRETATION	18
4.1 Introduction.....	18
4.2 Determinants of IPO timings in Kenya	18
4.3 Hot Market Issues.....	25
CHAPTER FIVE.....	27
5.1 Introduction.....	27
5.2 Summary of Findings and Conclusions	27
5.2 Implication of the study	28
5.3 Recommendations for further research.....	28
5.4 Limitations of the study	29
APPENDICES.....	34
Appendix 1: Questionnaire.....	34
Appendix 2: List of companies listed in the period between 2000 and 2016	35
Appendix 2: NSE 20 share index from year 2000 to 2015	36
Appendix 3: Annual Real GDP growth rate from year 2000 to 2015	37
Appendix 4: Questionnaire data on companies that have issued IPOs	37
Appendix 5: Questionnaire data on companies that haven't issued IPOs	38

LIST OF TABLES

- Table 1: Companies in Sub Sample 1 (Companies that have issued IPOs)
- Table 2: Companies in Sub Sample 2 (Companies that haven't issued IPOs)
- Table 3: Compiled data from both samples
- Table 4: Descriptive statistics from Friedman test
- Table 5: Friedman test of significance
- Table 6: Regression model summary
- Table 7: ANOVA table
- Table 8: Table of Coefficients

ABBREVIATIONS

CFO- Chief Financial Officers

IB- Investment Banks

IPOs- Initial public offers

NSE- Nairobi stock exchange

SPSS- Statistical Package for the Social Sciences

US- United States

ABSTRACT

One of the most critical events in a company is when it issues its shares to the public followed by subsequent listing on a securities exchange market. The timing of when to issue this shares is of great importance to the success of the company. In line with wealth maximization strategy, CFOs and managers need to factor in relevant conditions that will result in a favorable issue price and subscriptions. This study sought to establish the determinants of IPO timings in Kenya. This was done through analysis of data on determinants of IPO timings collected from CFOs. The CFOs were grouped into two main categories; those whose companies had issued IPOs and those that hadn't issued but met the qualifications of issuing.

The findings indicated that need for capital to finance company growth was the most important determinant of IPO timings in Kenya, this was then followed by macroeconomic growth. Stock market expansion resulting from investors' optimism, conditions in the issuers business sector and investors interest in the type of business were also considered to be important determinants of IPO timings. Interest in IPOs by companies in the same business sector was viewed as the least important determinant of IPO timing. The study also sought to establish if there was occurrence of hot market issues. Hot market issues involve the clustering of IPOs indicating market timing attempts where CFOs seek to benefit from opportunity for wealth maximization. The study didn't find evidence of hot market issues at the NSE. The project therefore proposes consideration of determinants of IPO timings by companies intending to issue IPOs and the creation of an efficient IPO listing process that will enable firms take advantage of favorable determinants of IPO timing.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

An initial public offer can be defined as the first selling of a company's stocks to external investors and allowing the stocks to trade in public markets (Brigham & Ehrhardt 2005). Studies conducted on the working of IPOs in Kenya have indicated that several factors come into play from the issuance of an IPO. A study on short run performance on Initial Public Offerings in the NSE conducted by Thuo (2009) confirmed underpricing of IPOs coupled by the Long-run underperformance of IPOs; supporting findings by Ritter (1991). Results from Thuo's study indicate that IPO firms leave about KSh. 20.842 billion on the table as the underpricing cost; which is in line with the money left on the table hypothesis proposed by Loughran and Ritter (2002). This means that the companies issuing IPOs lost capital amounting to KSh. 20.842 billion due to mispricing of their IPO.

The timing of an IPO plays a critical role in pricing of an IPO and subsequent performance

of the issue. Poor timing of the IPO in turn results in unfavorable results for the issuing firm and consequently might result in a failed IPO issue. Firms that issue their stock at unfavorable periods might then withdraw their offer and subsequently suffer further losses (Latham and Bran, (2010)). Managers therefore have to ensure that they time their IPOs to facilitate wealth maximization in their companies and reduce chances of incurring losses in the process.

Importantly, the Kenyan financial markets are composed of transaction advisors who guide companies on matters relating to stock transactions. These include investment banks, lawyers, stock brokers and financial analysts among others. The investment bank's recognition and expertise in the firm's industry are paramount in facilitation of purchase of firm's stocks at the issue price. These banks advise the firm on the time when the IPO

could result in optimal performance in the market (Sharpe & Gordon, 1999). According to Hensler and Springer (1997); Demers and Joos (2007), expected survival time can easily be predicted based on the factors surrounding the time of the IPO.

This project seeks to find the evidence of empirical studies on determinants of IPO timings on firms listed at the NSE. The study will also lay emphasis at establishing whether firms time their IPOs in line the Hot market hypothesis. According to Ritter (1984) there are certain periods in time characterized by several IPO issues (the hot-issue periods) and whereas other periods experience few IPO issues (the cold-issue period).

1.1.1 Determinants of IPOs

Determinants of IPOs have been investigated in several studies in the past. The determinants of firms going public through an IPO can be summarized by a firms existing relationship to the following factors:

Growth Financing: Pagano and Roell (1998) point out that IPOs come in handy as a way of fund raising by firms undergoing their growth stage which can't be facilitated through the company's internal cash flows.

Portfolio Rebalancing: Zingales (1998) and Pagano (1993) show that owners seek to spread or divest their wealth acts as a crucial determinant in the issuing of an IPO by the current shareholders in a firm.

Liquidity: Issuing of an IPO can be a result of a company seeking to increase the liquidity of their shares (Bolton and Von Thadden, (1998)). An IPO results in increased trade volume of a company shares among a variety of investors hence making the shares easily transferrable.

Windows of Opportunity: Ritter (1991) points out that companies may time their IPO to gain from the firms in the same industry are currently overvalued.

Getting Publicity: Being listed is viewed as a means of marketing by the company.

Subramayan and Titman (1999) found that the firm's stakeholders obtain costless information when dealing with a listed firm.

1.1.2 Timing of Initial Public Offers

Timing of Initial Public Offers in the context of this study will refer to the firm's decision on when to issue an IPO. The decision of when to issue an IPO is of vital importance in the creation of favorable results for the firm going public (Latham and Ban (2010)). The firm's management therefore has to facilitate efficient timing of an IPO in order to enable the maximization of shareholders' wealth.

Loughran and Ritter (1995) found that firms time their IPOs to benefit from the windows of opportunity that enables them get the best offering prices. This implies the vital importance of appropriate timing of IPOs required in order to maximize shareholder wealth from the IPO process.

1.1.3 Determinants of IPOs Timing

The timing of IPOs has been analyzed in several international studies. In one of the main studies cited in identification of determinants of IPO timing Brau and Fawcett (2006) summarize the determinants of IPO timing into three main theoretical areas:

Companies reach a certain point in their business growth cycle and need external equity to continue to grow. The empirical evidence of need for capital for continue financing growth is verified by Lowry (2002) and Choe and Nanda (1993)

Timing relies on the attractiveness of the IPO market. Lowry and Schwert (2002) found that the first day performance of companies issuing IPOs prompts other firms to also issue IPOs. Choe, Masulis and Nanda (1993) also found a correlation where good firms issuing IPOs induced other firms to issue theirs.

Managers try to gain from bull markets by capturing attractive stock prices. Ritter and

Loughran and Ritter (1995) found that companies time their IPOs to try to benefit from conditions that enable them get best offering prices.

1.1.4 Determinants of IPOs Timing in Kenya

In Kenya, few studies have been conducted with regards to the timing of IPOs at the NSE. However, several studies done in other areas such as The short-run performance of IPOs, long-run performance of IPOs and determinants of IPOs at the NSE have put into light IPO timing activities by manager of companies. Mutoka (2015) in his survey of determinants of IPO decision for companies listed at the NSE found that the most common determinant was to meet financing needs, followed by the push given by favorable market conditions and lastly as an exit strategy that enables founder entrepreneurs cash on their investment.

Koech found existence of underpricing of issued IPOs and their long-run underperformance in her study on short-run and long-run performance for firms quoted at the Nairobi Securities Exchange. The long run underperformance of IPOs concurs with international studies that imply that managers time their IPOs to benefit from opportunities that enable them get the most competitive offering prices. Ndatimana's study on performance of initial public offering however contradicts long-run underperformance of IPOs at the NSE due to the use of market adjusted abnormal returns in the study.

1.2 Research Problem

The pecking order theory by Myres and Majluf (1984) states that equity is the least preferred source of financing by firms. The theory implies that firms will result to issuing equity as tool of last result after exhausting plausible internal financing and debt financing options. This emphasizes the need for adequate preparation and proper timing when issuing an IPO. The largest threat faced by a firm during the IPO process relates to external factors probably because they can't be controlled by the company's management (Latham and Braun (2009)). Lack of adequate preparation and poor market timing can result in the failure or withdrawal of an IPO (Ernst and Young (2010)).

Various researchers have highlighted a couple of aspects that could impact on the performance of an IPO. Stein (1989) observes that higher earnings by firms are important because they enable them to show positive growth opportunities hence encouraging optimistic valuations. This increases investor confidence at that particular time. However, the success rate of timing by firms going public has remained in question overtime. For instance, in the United States, capital markets record a 20% withdrawal rate of companies that previously issued IPO, inflicting a number of additional losses (Latham and Bran, 2010). As such, the decision-making process of whether or not to take a company public at a particular point in time is burdened with the responsibility of properly assessing and weighting the benefits and costs of a successful IPO along with the devastating losses of a failure.

In Kenya, a few studies have been conducted on initial public offers. For instance, Jumba (2002) studied IPO performance in Kenya. Maina (2006) conducted a similar study by doing an analysis of IPO performance in Kenya. Another was conducted by Moko (1995) on the relationship between offer price and the subscription rate of IPO at the NSE. Evidently, many studies have been focused on the pricing of IPOs with very little been done on the determinants of IPO timing in Kenya. This study therefore aims to fill the research gap by identifying the specific determinants of timing of IPOs at the Nairobi Securities Exchange in Kenya.

1.3 Research Objective

The objective of this study is to identify the key determinants of IPO timings at the NSE.

1.4 Value of the Study

The findings and recommendations of this study will enable financial regulatory institutions like the capital markets authority to understand the real challenges faced by a new firm in gaining entry to the financial markets. This will enable them to formulate policies that address the specific needs of the firm in an effort to increase their equity.

Secondly, this study will help firms aspiring to join the stock market in making more

informed business decisions, leading to better business performance and improved efficiency of the stocks. This will make the firms more competitive since they would be able to increase their assets without unnecessarily increasing their liabilities.

This study will also add to the existing knowledge of the operations of financial markets. Most of the existing literature is based on studies done in other countries and more especially in the developed countries which has been misconstrued as similar to the situation in Kenya. This study specifically targets studying unique groups that have not been studied before; it will lead to new knowledge. Similarly, it will lay the foundation for scholars who would want to further explore this subject. The research report could also be used in institutions of higher learning for academic referencing.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction.

This section reviews relevant literature regarding determinants of IPO timings. The literature review will be broken down into the following sections: 2.2) Theoretical framework, 2.3) Empirical evidence, 2.4) Hot market issues, 2.5) Summary of Literature Review and finally 2.6) Conceptual framework.

2.2 Theoretical Framework

The study will review theories relevant to the topic under study. These theories include; Life Cycle Theory, Market-Timing Theory and Pecking order theory.

2.2.1 Life Cycle Theory

The life cycle theory states that as a company grows to a certain point it is more economical for it to obtain external equity financing through an IPO. Zingales (1995) argues that a company early in its life cycle will be private, but as it grows adequately large, it becomes capable of going public.

This theory implies that the timing decision of an IPO is a natural occurrence resulting from the maturity of a company. Companies will time their IPOs with regards to their life cycle, consequently issuing an IPO at a point in time when they need capital to finance growth and create a public liquid market for firm ownership.

According to Pagano, Panetta and Zingales (1998), larger companies and firms in industries with a high market to book ratios are more prone to go public, and those companies going public seem to have reduced their cost of credit significantly. Lerner, 1994 observed that industry market to book value ratio has a significant effect on the choice to go public rather than to obtain additional venture capital financing. This theory therefore suggests that firms will time the issue an IPO in favor of their existing stage in their life cycle.

2.2.2 Market-Timing Theory

This is a theory of how firms in the economy decide whether to finance their projects with debt or with equity. Barker and Wuglar (2002) found that market timing was the main capital structure determinant with regards to debt and equity and as a result firms choose the financing alternative that seems to be most valued by financial markets. Lucas and McDonald (1990) developed an asymmetric information model in which firms would postpone their equity issue if they know they are valued lowly in the exchange market. For instance, when a stock market places too little value on the firm, given the knowledge of entrepreneurs, then they will delay their IPOs until a bull market offers more favorable pricing.

According to Choe, Masulis, and Nanda (1993), firms avoid issuing IPOs in periods where few other good-quality firms issue. Additional theories have proposed that markets provide valuable information to entrepreneurs who respond to increased growth opportunities signaled by higher prices Subrahmanyam and Titman (1999), Schultz (2000). Managers will therefore seek to time the issue of their IPOs at times when prevailing market conditions will result in most attractive offering prices.

Market timing of IPOs theory implies that similar efforts by managers to issue IPOs so as to benefit from windows of opportunity may result in the creation of 'Hot markets' characterized by a clustering of IPOs during favorable market conditions and 'Cold markets' during unfavorable market conditions (Ritter (1984)).

2.2.3 Pecking Order Theory

This theory was first suggested by Donaldson in 1961 and later modified by Stewart C. Myers and Nicolus Majluf in 1984. It states that companies prioritize their sources of financing according to cost of financing. As a result, companies first rely on internal funds and when that is depleted debt is issued, and when it is not sensible to issue any more debt equity is issued. It is assumed that companies have no target capital structure but due to adverse selection, firms will prefer internal to external finance. When external funds are used, firms will prefer debt to equity because of lower information cost associated with debt.

The pecking order theory assumes that companies don't have a target capital structure but instead focuses on asymmetric information cost. As a result, firms prioritize their financing strategy based on the path of least resistance. This theory relies on the assumption that cost of financing increases with asymmetric information. The company will therefore prefer internal funds, then debt and lastly equity when considering their financing strategy.

The hierarchy of financing sources in this theory therefore means that companies will issue their IPO at a time when they have run out of plausible options of financing through the retained earnings and debt instruments.

2.3 Empirical Studies

Several empirical studies have been done on issues surrounding IPO timing activities in stock markets. This section will identify empirical studies on determinants of IPO timing and 'Hot' market issue phenomenon resulting from IPO timing attempts.

2.3.1 Determinants of IPO timing

Empirical studies of determinants of IPO timing were summarized by Brau and Fawcett (2006) in their study where they interviewed 336 CFOs and sought to identify evidence of empirical IPO timing determinants. Empirical studies around IPO activities can be summarized into three main determinants of IPO timing.

First determinant of IPO timing can be viewed in terms of managers' efforts to take advantage of bull markets and attempt to capture attractive stock prices. The long-run under performance of IPOs indicates that manager time their IPO to take advantage of windows of opportunity that allow them to get the most attractive share prices (Ritter (1991)). The findings of Ritter (1991) were also found to be in effect at the NSE in a study by Koech (2011) that confirmed long run underperformance of IPOs at the NSE. Empirical measures of Bull markets comprise of current industry conditions (Pagano et. Al (1998), Current overall market conditions (Lucas and McDonald (1990)), Recent historic market conditions (Ritter and Welch (2002)), Predicted industry conditions

(Lowry (2002)) and Predicted overall market conditions (Lucas and McDonald (1990)).

Second determinant of IPO timing can be as a result of companies reaching a point in their life cycle where they require funds to finance growth. Lowery (2002) found that companies go public when they reach a certain point in their business growth cycle and require external equity to continue to grow. Mutoka (2015) in his study of determinants of IPO decisions at the NSE also found that the most common determinant for conducting an IPO at the NSE was as result of firm's efforts to meet financing needs.

Third determinant of IPO timing can be viewed as a drive prompted by attractiveness of the IPO market. Choe, Masulis and Nanda (1993) suggest that companies go public when other good firms are currently issuing. Lowry and Schwert (2002) on the other hand propose that recent first day performance of firms going public leads other firms to go public. Ndatimana (2008) found that IPOs issued at the NSE were underpriced in the premarket resulting in excess returns. This means that the high returns may prompt investors to easily take up shares of other issued IPOs in a bid to gain from short run sale of the stock.

2.4 Hot market Issues

Hot market issues refer to the clustering of IPOs at a particular point in time due to favorable economic conditions in the market (Lowry 2003). During periods of economic boom more firms issue IPOs thus creation of a Hot market while periods of economic recession few firms issue IPOs hence a 'Cold market. The IPO market can therefore act as an economic indicator due to its proven pro cyclical nature (Lowry (2003)). Ibbotson and Jaffe (1975) and Ritter (1980) show that IPOs come in waves.

Loughran (1995) investigated the timing of IPOs in fifteen countries in relation to inflation adjusted stock price index and GDP growth rates. He established that there was a positive relationship between number of IPOs and stock price levels, however he found no positive correlation with the cycle movements. Brau and Fawcett (2004) found that overall market conditions were considered to be the most vital aspect by CFOs when

timing an IPO.

Ameer (2012) identified that monetary policy has a direct impact on capital markets and central bank interventions propagates IPO cycles. However, Breginger and Glogova (2002) found that there was no significant influence of ten-year government bond yield on demand of raising equity through IPOs.

Pessimism on stock markets predicts downward pressure on market prices whereas optimism predicts higher stock market trading volume and higher returns (Tetlock (2007)). The stock market index is often a reflection of investors willingness to invest or not to invest. In line with the market timing theory; firms will seek to issue IPOs when there is positive growth in the stock market index indicating more willingness by investors to invest. This can therefore lead to a 'Hot' market issue where many firms issue their IPOs in line with the optimism from investors.

2.5 Summary of Literature Review

In a nutshell, the determinants of IPO timing can be broadly classified into two categories namely: the firm factors which mainly comprise the internal factors within the company and market-based factors which refer to elements at the stock market which are external to the issuing firm but significantly impact on the IPO of that business.

Regarding IPO timing, current academic studies focus on the underlying economic conditions as well as firm-specific qualities (Blum, 2011). Companies enter the capital market under favorable economic conditions that support their growth and development (Loughran and Ritter, 1995; Ritter and Welch, 2002).

Pastor and Veronesi (2003) also study the timing of the IPO but emphasize the importance of changing valuations. All other factors held constant; the company decides to go public due to improved market conditions, whatever the level of its market value. The existing literature on the timing of the IPO focuses on the behavior of aggregate time series of IPO volume.

Mutoka (2015) found that the most common determinant of issuing shares at the NSE was to meet financing needs, followed by push by favorable market conditions and finally as an exit strategy that enables entrepreneurs cash in on their investment. This implies that empirical evidence of IPO timing determinants has a strong relationship to determinants of IPO decisions at the NSE.

Evidently, previous theory and empirical studies have shown contradicting and inconsistent findings as to what is the most appropriate time to go public. This study shall, therefore, seek to ascertain the key determinants of IPO timing at the NSE.

2.5 Conceptual Framework

The diagram below illustrates the conceptual model for testing the occurrence of hot market issues at the NSE.

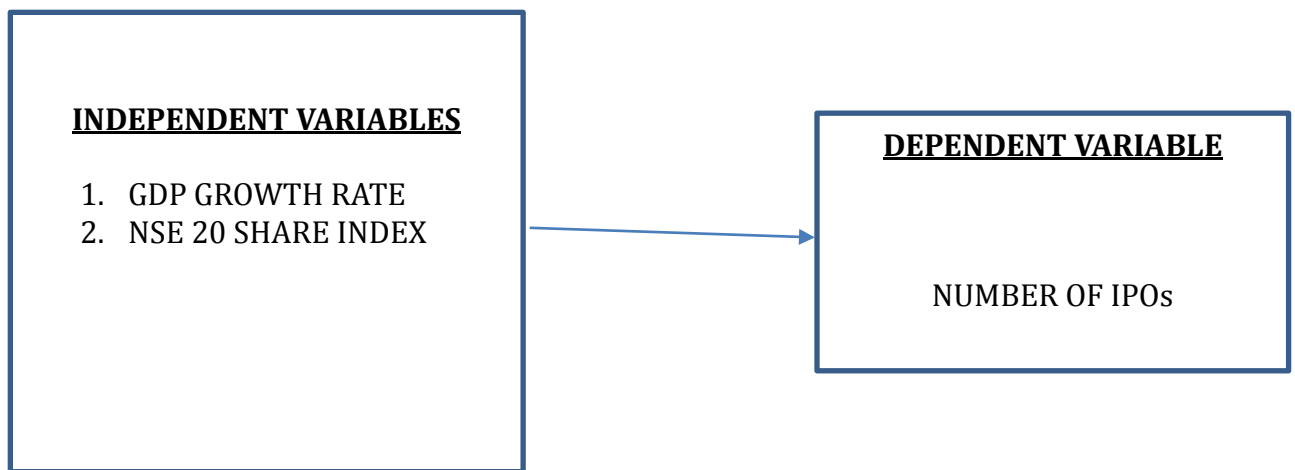


Figure 1: Conceptual framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methods of research that will be applied to objectively establish the relationship between the variables of the study. It also shows the research design, the population of study, and the sampling method and techniques to be used, a test of reliability and validity, data collection procedures and data analysis.

3.2 Research Design

A research design has been defined as a plan and structure of inquiry that is formulated to obtain a solution to a problem through providing answers to research questions (Cooper and Schindler, 2001). It can also be seen as a framework specifying the methods and procedures for collecting and analyzing data required to achieve the objectives. It is, therefore, a set of guidelines on data collection, measurement, and analysis that shows the context and scope of the study.

In this study, the most appropriate research design is an exploratory research design. This is because very little research has been done on the determinants of IPO timing in Kenya. The study will, therefore, seek to explore these determinants. However, to achieve optimal results of the study, a descriptive research design will also be adopted in defining some major concepts of this study. According to Saunders, Lewis and Thornhill (2003), use of multiple designs improves the validity of a study. Cooper and Schindler (2001) also found out that explanatory research designs use theories or hypothesis to explain events that caused a certain phenomenon to occur. The purpose of descriptive research is to; observe, describe and document the aspects of a situation as it naturally occurs (Polit and Hungler 1999).

The research will first seek to identify empirical evidence of IPO timing determinants at the NSE. This will be conducted through a questionnaire addressed to firms that have already issued IPOs at the NSE in the past and firms that are yet to issue IPOs but are

considered as capable candidates to issue IPOs. This design was successfully used by Brau and Fawcett (2004) and Kovandova, Meluzin and Zinecker (2014) on the topic of determinants of IPO timings.

Market timing determinants resulting in clustering of IPOs will be tested using time series regression analysis.

3.3 Target Population

A target population refers to the universal set of the study including all members of a real or hypothetical set of people, events or objects to which an investigator wishes to generalize the result. This study aims to study companies which issued IPOs at the NSE from the year 2000 to the year 2016 and the companies that didn't issue IPOs but were considering to issue in these period or in the future. The companies that issued IPOs are twelve in number and are listed in appendix II.

This population is deemed suitable for this study as it enables the establishment of timing determinants that were considered in successfully executed IPOs in the recent past and those that are considered by companies yet to issue IPOs. As a result, this endeavors to fill the gap in establishing the research gap of determinants of IPO timings by companies at the NSE.

3.4 Sample Design

Besides reducing the cost and time of the study, sampling enables a researcher to estimate some unknown characteristics of the population and make generalizations (Zikmund 2003). A sample is a representative or a subset containing the characteristics of a larger population. A larger sample size will be necessary due to the heterogeneity of the population under study (Zikmund, 2003; Cooper & Schindler, 2010).

The study will use two sub samples. Sub sample 1: A sample of all twelve companies that issued IPOs in the target population and Sub Sample 2: A random sample of twelve

companies that are yet to issue IPOs but have considered issuing in the past or are candidates for issuing in the future.

3.5 Data Collection

Data on firms that have considered issuing IPOs or are considering issuing IPOs in the future will be collected from Investment Banks and brokers with past experience in issuing IPOs at the NSE. Data on firms that issued IPOs in these period will be collected from the Capital Markets Authority publication.

Study on empirical evidence of determinants of IPO timing will rely on primary data collected through physical questionnaires addressed to CFOs in the sample population. These questionnaires will seek to establish whether the IPO timing theories are considered as important determinants of IPO timings by the firms. Data on each determinant will be collected through a five point Likert scale ranging from 1 (not important) to 5 (very important). This is illustrated in Appendix I.

Data on GDP growth rate, NSE 20 Share Index and number of yearly issued IPOs from the year 2000 to 2016 will also be collected. Data on GDP growth rate will be collected from World Bank Publications while the rest of the data will be compiled from Capital Markets Authority publications.

3.6 Data Reliability and Validity

According to Kothari, (2004), reliability refers to the extent to which the data collection methods provide consistent results. On the other hand, validity indicates the level to which the proposed instruments measure the concepts they purport to measure (Kothari, 2004). The study supervisor will examine the tools that will be used for this study and determine their validity. Moreover, this study will focus on primary data from key persons involved in the IPO decisions for companies issuing IPOs to enhance reliability and validity of the data.

3.7 Data analysis

After data collection, editing and coding of the instruments will be done. study will rely on descriptive methods in analyzing the data. Descriptive analysis of the data collected will depend on mean, standard deviation and relative frequency. From the mean of the responses of each factor it can be established whether it's considered as an important determinant in the IPO timing process. Relative frequencies of responses 4 (Important) and 5 (Very Important) will also be established in order to show percentage of responses who considered the particular factor as being an important IPO timing determinant in the Kenyan market. Standard deviation will also be of high importance in establishing the variation of the data.

Analysis of the data collected on the Likert scale of each response will be performed using SPSS. The analysis of data from the two sub samples will be performed on two separate tables. The first table will be made up of data from companies that have already issued IPOs while the second table will comprise of companies that are yet to issue IPOs. This approach will also enable the comparison of determinants of the IPO timings by both sub samples. Interpretation of the determinants of IPO timings in Kenya will thus be dependent on the output of the analyzed perception of CFOs in the sampled companies.

Analysis of occurrence of Hot market issues will be tested using regression analysis in SPSS. The model will be in line with previous research done in the area (Ameer (2012), Brzeczynski (2014), Jargot (2006), Lapinska, Meluzin and Zinecker (2014) where the situation preceding the IPO year is crucial. Therefore, all independent variables in this model will comprise of one-year delay.

Estimation of parameters in the model will be performed using ordinary least squares. Reduction of insignificant variables will be done by means of stepwise elimination, removing sequentially the variables with the largest p-value. White's test will be conducted to check for heteroscedasticity in the data.

The data model to be used in the study will be:

$$N_t = \beta_0 + \beta_1 \text{GDP}_{t-1} + \beta_2 \text{NSI}_{t-1} + \varepsilon_t$$

Where;

N_t = Number of IPOs issued during year t

β_0 = Constant

GDP_{t-1} = Percentage growth in GDP as of end of year t-1.

NSI_{t-1} = Percentage change NSE 20 Share Index at end of year t-1

ε_t = Error Term

The model will seek to test the following hypothesis;

H1: There's a positive correlation between number of IPOs and GDP growth rate from previous year.

H2: There's a positive correlation between percentage change in NSE 20 Share Index and number of issued IPOs

3.7.1 Test of Significance

The data will be evaluated at a significance level of $\alpha = 5\%$. The Friedman and the Wilcoxon post hoc test will be used to test the significance of responses in questionnaires collected from CFOs in firms that have issued IPOs and firms that are yet to issue. Significance of parameters in the regression model will be tested using the F-Statistic.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND INTERPRETATION

4.1 Introduction

This chapter presents the analysis of data that was collected on determinants of IPO timings and the occurrence of hot market issues as a result of IPO market timing. The chapter also illustrates the findings and the conclusions after data analysis.

4.2 Determinants of IPO timings in Kenya

The research method allowed for the collection of data on determinants of IPO timings in Kenya directly from the CFOs in the population sample. A total of twenty-four questionnaires were sent out; where twelve were addressed to companies in Sub-sample 1 (Companies that have issued IPOs) and twelve to companies in Sub sample 2 (Companies that are yet to issue IPOs). Out of the twenty-four questionnaires sent out sixteen were responded to: six in Sub sample 1 and ten in Sub sample 2.

The questionnaire facilitated the collection of data on the determinants of IPO timings based on empirical evidence. The CFOs ranked the following empirical determinants of IPO timings on a five point Likert scale ranging from 1 (Unimportant) to 5 (Very Important):

- i) Current need for Capital to finance additional company growth
- ii) Macroeconomic Growth
- iii) Condition's in the issuer's business sector
- iv) Stock market expansion resulting from investors' optimism
- v) Investors interest in the type of business
- vi) Interest in IPOs by other companies in the same business sector

The data analysis results of the research are presented in three tables namely **table 1**, **table 2** and **table 3**. **Table 1** represents analysis of data collected from companies that have issued IPOs, whereas **table 2** represents analysis of data collected from companies

that haven't issued IPOs and finally **table 3** represents the analysis of the consolidated data from both tables.

Table1: Companies in Sub Sample 1 (Companies that have issued IPOs)

Statistics						
	Capitalgrowth	Macroeconomic	Businesscondition	StockMarket	InvestorInterest	Ipinterest
N Valid	7	7	7	7	7	7
Missing	0	0	0	0	0	0
Mean	4.71	4.43	4.14	3.86	3.71	2.29
Median	5.00	4.00	4.00	4.00	4.00	2.00
Std. Deviation	.488	.535	.378	.690	1.113	.756
Variance	.238	.286	.143	.476	1.238	.571

Analysis of collected data indicated that current need for capital to finance growth was considered as the most important determinant of IPO timings by companies that have issued IPOs. The average response was 4.71 ± 0.488 . Need for capital to finance growth 29% of the respondents considered need for capital growth as an important determinant of IPO timings whereas 71% of the respondents found it as a Very important determinant of IPO timings.

Macroeconomic growth was viewed as an important determinant of IPO timings with an average of $4.43 + 0.286$ (median of 4). 57% of the respondents considered macroeconomic growth as an important determinant of IPO timings whereas 43% considered it as a very important determinant. Macroeconomic growth was thus viewed as the second most important determinant of IPO timings after need for capital to finance additional company growth.

Conditions in issuers' business sector were also considered as important determinants of IPO timings with a mean of 4.14 ± 0.378 (Median of 4). 86% of the respondents viewed conditions in the issuers business as being an important determinant of IPO timings while

14% viewed it as a very important determinant of IPO timings. This meant that conditions in the issuers' business sector ranked as the third most important determinant of IPO timings.

Stock market expansion resulting from investor optimism had a mean 3.86 ± 0.69 (median of 4) hence making it an important determinant of IPO timings. 57% of the respondents viewed stock market expansion from investor optimism as an important determinant of IPO timings whereas 14% viewed it as a very important determinant of IPO timings. This therefore ranked as the fourth most important determinant of IPO timings.

Investor interest in the type of business had an average of 3.71 ± 1.113 (median of 4). This means that investor interest in the type of business was viewed as an important determinant of IPO timings. 42% of the respondents viewed investor interest in the type of business as an important determinant of IPO timing and 28% viewed it as a very important determinant of IPO timings.

Interest in IPOs by companies in the same business sector was viewed as the least important determinant of IPO timings. None of the respondents viewed this as either an important determinant or a very important determinant of IPO timings. The mean response was 2.29 ± 0.756 (median of 2) meaning that interest in IPOs by companies in the same business sector was viewed as being 'Somewhat important'.

Table 2: Companies in Sub Sample 2 (Companies that haven't issued IPOs)

	Statistics					
	Capitalgrowth	Macroeconomic	Businesscondition	StockMarket	InvestorInterest	Ipinterest
N Valid	10	10	10	10	10	10
Missing	0	0	0	0	0	0
Mean	4.70	3.70	2.80	3.50	3.40	2.60
Median	5.00	4.00	3.00	4.00	3.00	3.00
Std. Deviation	.483	.949	1.135	1.080	1.430	1.174
Variance	.233	.900	1.289	1.167	2.044	1.378

Responses from companies that are yet to issue IPOs also indicated that current need for capital to finance company growth was viewed as the most important determinant of IPO timings. This determinant had an average of 4.7 ± 0.233 (median of 5). 30% of the respondents viewed need for capital to finance company growth as an important determinant while 70% of the respondents viewed it as a very important determinant of IPO timings.

Macroeconomic growth was viewed as an important determinant of IPO timings by companies which are yet to issue IPOs; with a mean of 3.7 ± 0.9 (Median of 4). 40% of the respondents viewed macroeconomic growth as an important determinant of IPO timing while 20% viewed it as a very important determinant of IPO timing.

Conditions in the issuers business were viewed as 'Somewhat important' where the mean response was 2.8 ± 1.135 (Median of 3). 30% of the respondents viewed conditions in the issuers business as important determinants of IPO timings and 20% of the respondents viewed it as a very important determinant of IPO timing.

Stock market expansion resulting from investor optimism had an average of 3.5 ± 1.080 (Median of 4). This means that it's viewed as important determinant of IPO timings. 30% of the respondents viewed stock market expansion as an important determinant of IPO timings and 20% of the respondents viewed it as very important determinant of IPO timings.

Investor interest in the type of business had a mean of 3.4 ± 1.43 (Median of 3). This means that investor interest in the type of business was generally viewed as being neither unimportant nor important. However, 30% of the respondents viewed investor interest in the type of business as an important determinant of IPO timing and 20% of the respondents stated that it was a very important determinant of IPO timing.

Interest in IPOs by other companies received least support when considering IPO timings. The responses had a mean of 2.6 ± 1.174 (Median of 3). Only 30% of the

respondents viewed interest in IPOs by other companies as an important determinant of IPO timing while none of the respondents viewed it as a very important determinant of IPO timing.

Table 3: Compiled data from both samples

Statistics						
	Capitalgrowth	Macroeconomic	Businesscondition	StockMarket	InvestorInterest	Ipointerest
N Valid	17	17	17	17	17	17
Missing	0	0	0	0	0	0
Mean	4.7059	4.00	3.35	3.65	3.53	2.47
Median	5.0000	4.00	4.00	4.00	4.00	2.00
Std. Deviation	.46967	.866	1.115	.931	1.125	1.007
Variance	.221	.750	1.243	.868	1.265	1.015

From the statistics in the table above, it is evident that the most important determinant of IPO timings was need for capital to finance company growth (Mean of 4.7). 94% of the respondents either viewed this determinant as important (27%) or very important (67%). Need for capital to finance company growth supports findings by Lowry (2002). These findings also support the life cycle theory implying that companies will time to issue their IPO in consideration of the stage in their business life cycle. The company will therefore issue its IPO at a time when the need for additional capital required to finance growth arises.

Macroeconomic growth was viewed as the second most important determinant of IPO timings with a mean of 4. 44% of the respondents viewed macroeconomic growth as an important determinant and 27% viewed it as a very important determinant of IPO timings. This shows that a total of 72% of the respondents viewed macroeconomic growth as a relevant determinant of IPO timings. This is in line with findings by Lucas and McDonanld (1990) who predicted that overall market conditions to be determinants of IPO timings.

Stock market expansion resulting from investor optimism featured as the third most important determinant of IPO timings with a mean of 3.65. This is in line with market timing attempts used by managers who attempt to take advantage of windows of opportunity that enable them issue their shares at favourable prices (Ritter (1991). 39% of the respondents viewed stock market expansion resulting from investor optimism as an important determinant of IPO timings while 17% of them viewed it as very important determinant of IPO timing. This implies that 56% of the respondents viewed stock market expansion as a relevant determinant of IPO timings.

Investors interest in the type of business was also viewed as an important determinant of IPO timings with a mean of 3.53. 22% of the respondents in the sample viewed it as an important determinant of IPO timing while 28% of the respondents viewed it as a very important determinant of IPO timings. This implies that 50% of the respondents viewed investors interest in the type of business as relevant determinant of IPO timings.

It was noted that 50% of the respondents viewed conditions in the issuers business sector as being a relevant determinant of IPO timings. 38% of the respondents viewed it as an important determinant while 12% of the respondents viewed it as a very important determinant of IPO timings. The overall mean of responses regarding conditions in the issuers business as being a determinant of IPO timings was 3.35.

Interest in IPOs by other companies in the same business sector received least support as a determinant of IPO timings. Only 16% of the respondents viewed it as an important determinant of IPO timings while none of the respondents viewed it as very important determinant. The mean response was 2.47. This implies that the respondents viewed interest in IPOs by other companies in the same business sector as neither important nor unimportant.

The Friedman test was conducted on the collected data. Descriptive statistics were also included in order to summarise information from the data collected.

Table 4: Descriptive statistics from Friedman test

Descriptive Statistics				
	N	Percentiles		
		25th	50th (Median)	75th
Capitalgrowth	17	4.00	5.00	5.00
Macroeconomic	17	3.50	4.00	5.00
Businesscondition	17	2.50	4.00	4.00
StockMarket	17	3.00	4.00	4.00
InvestorInterest	17	2.50	4.00	5.00
Ipointerest	17	2.00	2.00	3.00

Table 5: Friedman Test of Significance

Test Statistics ^a	
N	17
Chi-Square	32.547
Df	5
Asymp. Sig.	.000

a. Friedman Test

There was a statistically significant difference in the mean ranks of determinants of IPO timings since $X^2(5) = 32.547$, $p=0.000$

Post hoc analysis with Wilcoxon signed rank test was then conducted with Bonferroni adjustment where the level of significance (0.05) was divided by number of test (15). This yielded a level of significance of $p < 0.003$.

The Wilcoxon ranked test found that there were statistically significant differences in only three trials; Conditions in the issuers business vs Need for capital to finance growth ($Z=-3.096$, $p= 0.002$), Interest in IPOs by other companies in the same business sector vs need for capital to finance growth ($Z=-3.653$, $p= 0.000$) and Interest in IPOs by other companies in the same business vs macroeconomic growth ($Z=-3.145$, $p= 0.002$).

4.3 Hot Market Issues

A study on occurrence of hot market issues in Kenya IPOs was done through regression analysis. Number of issued IPOs(Nt) was the dependent variable while the GDP growth rate(GDP) and NSE 20 share index growth(NSI) of the preceding year served as the independent variable. The model summary below was generated through SPSS.

Table 6: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.498 ^a	.248	.122	.90046

a. Predictors: (Constant), NSI, GDP

Findings indicate a multiple correlation coefficient of 0.498. This implies that there's a relatively good level of prediction. The coefficient of determination of 0.248 implies that GDP growth rate and NSE 20 share index accounted for only 24.8% of the variability in number of issued IPOs. Based on these findings it can be concluded that GDP growth rate and NSE 20 share index growth rate had little effect on the number of issued IPOs. The coefficient of determination also implies that 75.2% of the variations were not as a result of the independent variables.

Table 7: ANOVA table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.203	2	1.602	1.975	.181 ^a
	Residual	9.730	12	.811		
	Total	12.933	14			

a. Predictors: (Constant), NSI, GDP

b. Dependent Variable: Nt

The F-ratio in the ANOVA table above was used to test whether the overall regression model was a good fit for the data. From the ANOVA table imply that GDP growth rate and NSE 20 share index aren't statistically significant determinants of number of annually issued IPOs, $F(2,95)$, $p > 0.05$. This may however be as a result of limited data entries or absence of other determinants of IPO timings in the model.

Table 8: Table of Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.073	.489		-.149	.884
	GDP	.287	.713	.106	.403	.694
	NSI	17.708	10.157	.456	1.743	.107

The coefficient table above illustrates the general form of the equation to predict number of issued IPOs. The unstandardized coefficients imply that holding other factors constant; one percentage increase in GDP growth rate results in a 0.287 increase in number of issued IPOs whereas one percentage increase in NSE 20 share index results in an increase in number of issued IPOs by 17.708. This table also tested for the statistical significance of each independent variable. GDP growth rate has a p-value of 0.694 while NSE 20

share index has a p-value of 0.107. It can therefore be concluded that neither one of the independent variables is statistically significantly different to zero.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of research findings, the conclusion of the study, suggestions for further research and study limitations.

5.2 Summary of Findings and Conclusions

CFOs responses on determinants of IPO timings strongly support empirical literature. It is however critical to note that the perceptions on importance of the determinants of IPO timings varied among the respondents.

The CFOs considered the current need for capital to finance company growth as the most important determinant of IPO timings. This was closely followed by macroeconomic growth. From these findings it can be concluded that firm specific growth accompanied by macroeconomic growth form a critical part of the IPO timing decision making process.

The findings also suggested that other companies issuing IPOs was considered as the least important determinant of IPO timings. This implies that companies timing their IPO pay little attention to other companies' IPO activities but rather concentrate on their firm specific conditions and overall market conditions.

The study on occurrence of Hot market issues indicated that there was no significant occurrence of clustering of IPO issues in the Kenyan security exchange market. This implied that there might be minimal attention by CFOs and managers in trying to take advantage of windows of opportunity supported by favorable economic growth

and a bullish stock market. This could also be as a result of a few number of IPOs issued in the Kenyan market in comparison to number of IPOs issued in other developed countries.

5.2 Implication of the study

IPO timing is of great importance for the performance of an IPO issue. Proper timing of when to issue an IPO results in favorable listing conditions whereas poor timing results in unfavorable conditions. Favorable listing conditions can be in form of attractive issue prices and uptake of all shares whereas unfavorable listing conditions can result in poor issue prices and withdrawal of the IPO.

CFOs need to pay close attention to the firm specific and market specific conditions that will result in favorable IPO issues. Firms aspiring to issue IPOs should therefore be prompted to establish their need for capital in the growth stage, macroeconomic conditions and the prevailing stock market conditions before issuing the IPO.

The regulatory authorities need to come up with legislation that facilitate the timely issuance of an IPO. This will enable firms achieve efficient IPO timing results at the stock market.

5.3 Recommendations for further research

The study leaves room for future research on the subject of IPO timings. Further analysis can be done at establishing the firm specific and market specific motivations of IPO timings. Future analysis can also be conducted to confirm consistency in the findings of this study.

A study on Hot market issues can also be conducted using additional variables that can be used as relevant measures of economic growth or stock market activities. These studies may factor in variables such as inflation and the NSE all share index to establish existence of correlation with the number of issued IPOs. The analysis can also be modified to enhance accuracy by reducing the time frames to either quarterly or monthly intervals.

Further studies on the working of IPOs can also be conducted such as: Underwriter selection in IPOs, Cyclical nature of IPOs and IPO underpricing.

5.4 Limitations of the study

This study provides needed insights on the determinants of IPO timings in Kenya. It is however relevant to note some of the limitations in the study.

The study relies on questionnaires addressed to CFOs to establish the determinants of IPO timings. These questionnaires may have resulted in bias opinion from the respondents. The questionnaires relied on Likert scales and thus made it difficult to measure accurately the difference between two responses. For instance, it is not easy to measure the difference between important and very important.

The study on Hot market issues only relied on two independent variables. This might have left out other important considerations that result in Hot market issues.

References

- Allen, Franklin, and Gerald R. Faulhaber, (1989), Signaling by underpricing in the IPO market, *Journal of Financial Economics* 23, 303–324.
- ALTI, A., 2005: IPO Market Timing. Austin: University of Texas. Available from internet: <http://www2.mcombs.utexas.edu/faculty/aydogan.alti/Research/ipo.pdf>.
- Baker, M., Wurgler, J., (2000): The equity share in new issues and aggregate stock returns. *Journal of Finance*, 55, 5: 2219–2257. ISSN 1540-6261.
- Benninga, S., Helmantel, M., Sarig, O., (2005): The timing of initial public offerings. *Journal of Financial Economics*, 75: 115–132. ISSN 0304-405X.
- Benveniste, Lawrence M., and Paul A. Spindt, (1989), How investment bankers determine the offer price and allocation of new issues, *Journal of Financial Economics* 24, 343–362.
- Benveniste, Lawrence M., and William J. Wilhelm, (1990), A comparative analysis of IPO proceeds under alternative regulatory environments, *Journal of Financial Economics* 28, 173–208.
- Black, Bernard S., and Ronald J. Gibson, (1998), Venture capital and structure of capital markets: Bank versus stock markets, *Journal of Financial Economics* 47, 243–277.
- Boehmer, E., Ljungqvist, A., (2004): *On the decision to go public: Evidence from privately held firms*. Deutsche Bundesbank Discussion Paper Series 1: Economic Studies.
- Brau, J. C., Fawcett, S. E., (2006): Initial Public Offerings: An Analysis of Theory and Practise. *Journal of Finance*, 61, 1: 399–436. ISSN 1540-6261.
- Brau, J. C., Francis, B., Kohers, N., (2003): The Choice of IPO versus Takeover: Empirical Evidence. *Journal of Business*, 76, 4: 583–612. ISSN 0148-2963
- Burgstaller, J. (2008) When and why do Austrian companies issue share?
- Chemmanur, Thomas J., (1993), The pricing of initial public offers: A dynamic model with information production, *Journal of Finance* 48, 285–304.
- Choe, Hyuk, Ronald Masulis, and Vikram Nanda, 1993, Common stock offerings across the business cycle: Theory and evidence, *Journal of Empirical Finance* 1, 3–31.
- Cooper, D. R., & Schindler, P. S. (2001). *Business Research Methods o" ed*). Boston: McGraw-Hill.

- Corrado, C. and Jordan, B. (2002). *The Fundamentals of Investments Valuation and Management*.
- Ernst & Young. (2010). *Ernst and Young's guide to going public*.
- Giannini (1999) (<http://www.newcap.com/userfiles/File/Publications/pub16.pdf>)
- He, P. (2007). *A Theory of IPO Waves*. University of Illinois at Chicago.
- Helwege, J., Packer, F., (2003): *The Decision to Go Public: Evidence from Mandatory SEC Filings by Private Firms*, Charles A. Dice Center for Research in Financial Economics Working Papers
- Ibbotson, Roger and Jefferey Jaffe, (1975), 'Hot issue' markets, *Journal of Finance* 30, 1027-1042.
- Ibbotson, Roger, Jody Sindelar, and Jay Ritter, (1988), Initial public offerings, *Journal of Applied Corporate Finance* 1, 37-45.
- Jumba N. W, 2002, Initial Public Offer Performance in Kenya, Unpublished MBA Thesis, University of Nairobi.
- Latham, S., & Braun, M. (2010). To IPO or Not to IPO: Risks, Uncertainty and the Decision to Go Public. *British Journal of Management*, 21(3), 666-683
- Lee, P. J.; Taylor, S.; and Walter, T. (1996). *Expected and realised returns for Singaporean IPOs: Initial and long-run analysis*. *Pacific-Basin Finance Journal* 4:153-180.
- Loughran T. and Ritter, J. (2002). Why Has IPO Underpricing Changed Over Time? *Financial Management journal* 5 – 37
- Loughran, T., Ritter, J. R., (1995): The New Issues Puzzle. *Journal of Finance*, 50: 1, 23–51. ISSN 1540-6261.
- Lowry, M. (2003). Why does IPO volume fluctuate so much? *Journal of Financial Economics*, 67, 3-40.
- Lowry, M., Schwert, G. W., (2002): IPO Market Cycles: Bubbles or Sequential Learning? *Journal of Finance*, 67, 3: 1171–1200. ISSN 1540-6261.
- Lucas, Deborah, and Robert McDonald, (1990), Equity issues and stock price dynamics, *Journal of Finance*, 45, 1019–1043.
- Maina N, (2006), An Analysis of Performance of Initial Public Offering, a case of NSE, Unpublished MBA Thesis, University of Nairobi.

- Miller, R., and Reilly, F. (1987). *An examination of mispricing, returns, and uncertainty for initial public offerings*. Financial Management (Summer): 33-38.
- Moko S.K, (1995), The relationship between offering price at subscription rate of initial public offering at the NSE, Unpublished MBA Thesis, University of Nairobi.
- NSE (1997). Circular Archives - Listing NSE/CLST/0164, Offer Documents. Government press Nairobi.
- Nyamute (1998) *The relationship between the NSE 20 index and major economic variables: inflation rate, money supply, treasury bills rate and exchange rate*, unpublished MBA Research Project, University of Nairobi
- Pagano, M., Panetta, F., Zingales, L., (1998): Why do companies go public: An empirical analysis. *Journal of Finance*, 53: 27–64. ISSN 1540- 6261
- Pástor, L., & Veronesi, P., (2003), «Stock valuation and learning about profitability», *Journal of Finance* 58, pp. 1749-90.
- Polit, D. F. & Hungler, B. P. (1999) *Nursing Research: Principles and Methods*. 6th Ed. Philadelphia, Lippincott
- Ritter, J. R. and Ivo, W. (2002). A Review of IPO Activity, Pricing, and Allocations. *Journal of Finance*, 57(4), 1795-1828.
- Ritter, J. R., (1984): The 'Hot Issue' Market of (1980). *Journal of Business*, 57, 2: 215–240. ISSN 0148- 963.
- Ritter, J. R., Welch, I., (2002): A review of IPO activity, pricing, and allocations. *Journal of Finance*, 57, 4: 1795–1828. ISSN 1540-6261
- Saunders, M., Lewis, P., & Thornhill A (2003). *Research Methods for Business Students (3rd ed)*. Harlow: Prentice Hall.
- Schultz, Paul H., (2000), The timing of initial public offerings, Working paper, University of Notre Dame.
- Seguin, Paul J., and M. M. Smoller, (1997), Share price and mortality: An empirical evaluation of newly listed Nasdaq stocks, *Journal of Financial Economics* 45, 333-364
- Spatt, Chester S., and Sanjay Srivastava, (1991), Preplay communication, participation restrictions, and efficiency in initial public offerings, *Review of Financial Studies* 4, 709–726.

- Stein, J., (1989), Efficient capital markets, inefficient firms: a model of myopic corporate behaviour, *Quarterly journal of Economics*, 104, 655- 669.
- Subrahmanyam, Avanidhar, and Sheridan Titman, 1999, The going public decision and the development of financial markets, *Journal of Finance* 54, 1045–1082.
- Teoh, Siew Hong, Ivo Welch and T.J Wong, 1998, Earnings management and long run market performance of initial public offerings, *Journal of Finance* 53, 1935-1974.
- Thuo, G.W. (2009) The short-run performance of initial public offerings in the NSE, Unpublished MBA project, University of Nairobi
- Welch, Ivo, 1989, Seasoned offerings, imitation costs, and the underpricing of initial public offerings, *Journal of Finance* 44, 421–450.
- Zikmund, W. G. (2003). *Business Research Methods* (7th Ed.). Mason, Thomson South-Western.
- Zingales, Luigi, 1995, Insider ownership and the decision to go public, *Review of Economic Studies* 62 425-448.

APPENDICES

Appendix 1: Questionnaire

My name is Kamau Joseph Muongi, a Master of Science in Finance student at the University of Nairobi. As part of the requirement for the award of the degree, I am expected to undertake a research study on “Determinants of Initial Public Offers’ (IPOs) Timing in Kenya”. I therefore seek your assistance to fill the questionnaire attached herewith. Kindly complete all the questions. The research result will be used for academic purposes only and will be treated with confidentiality. The information obtained will be purely for the purpose of this research and the identity of the respondents will be treated as strictly confidential. Thank you for your cooperation and assistance.

How important are the following factors influencing the timing of an IPO?

1= Unimportant

2= Somewhat Important

3= Neither important nor unimportant

4= Important

5= Very Important

	1	2	3	4	5
Current need for Capital to finance additional company growth					
Macroeconomic Growth					
Condition's in the issuer's business sector					
Stock market expansion resulting from investors' optimism					
Investors interest in the type of business					
Interest in IPOs by other companies in the same business sector					

Appendix 2: List of companies listed in the period between 2000 and 2016

Listing by IPO

Company	Shares on Issue Ordinary Shares	Year of Issue Year/Month	Issue Price KES/Unit	Sum Raised KES	Subscription level %
African Lakes (Delisted in 2003)	4,000,000	2000 March	94.5	378,000,000	150%
Mumias Sugar Company	3,000,000,000	2001 November	6.25	1,125,000,000	60%
Kengen	658,900,000	2006 April	11.9	7,840,910,000	333%
Scan group	69,000,000	2006 June	10.45	721,050,000	620%
Eveready	63,000,000	2006 Aug	9.5	598,500,000	830%
Access Kenya	80,000,000	2007 March	10	800,000,000	363%
Kenya Re	240,000,000	2007 July	9.5	2,280,000,000	334%
Safaricom	10,000,000,000	2008 June	5	50,000,000,000	532%
Co-op Bank	701,000,000	2008 October	9.5	5,400,000,000	81%
British American	660,000,000	2011 September	9	3,515,103,000	60%
Nairobi Securities Exchange	66,000,000	2014 September	9.5	627,000,000	764%
Stanlib Fahari Reit	625,000,000	2015 October	20	3,619,446,000	29%
TOTAL	16,166,900,000			76,905,009,000	

Source: NSE/CMA

Appendix 2: NSE 20 share index from year 2000 to 2015

Date	NSE 20 SHARE INDEX	Annual Change
12/10/2015	3,986	-22.03%
12/31/2014	5,113	3.77%
12/31/2013	4,927	19.21%
12/31/2012	4,133	28.95%
12/30/2011	3,205	-27.69%
12/31/2010	4,433	36.48%
12/31/2009	3,248	-7.76%
12/31/2008	3,521	-35.33%
12/31/2007	5,445	-3.56%
12/29/2006	5,646	42.10%
12/30/2005	3,973	35.68%
12/31/2004	2,928	6.97%
12/31/2003	2,738	100.87%
12/31/2002	1,363	0.58%
12/31/2001	1,355	-29.18%
12/29/2000	1,913	-16.93%

Source: Bloomberg, Own Calculations

Appendix 3: Annual Real GDP growth rate from year 2000 to 2015

Year	Real GDP Growth %
2000	0.6
2001	3.8
2002	0.5
2003	2.9
2004	5.1
2005	5.9
2006	6.5
2007	6.9
2008	0.2
2009	3.3
2010	8.4
2011	6.1
2012	4.6
2013	5.7
2014	5.3
2015	5.6

Source: KNBS, Worldbank

Appendix 4: Questionnaire data on companies that have issued IPOs

Capitalgrowth	Macroeconom ic	Businessconditi on	StockMark et	InvestorIntere st	Ipointeres t
5	5	4	3	4	1
4	5	4	4	5	2
5	4	4	4	2	3
5	4	5	4	5	3
5	4	4	5	3	2
4	4	4	3	3	3
5	5	4	4	4	2

Appendix 5: Questionnaire data on companies that haven't issued IPOs

Capitalgrowth	Macroeconomic	Businesscondition	StockMarket	InvestorInterest	Ipointerest
5	3	3	3	4	1
5	3	3	4	5	4
5	5	1	2	4	3
5	4	2	3	5	2
4	4	2	5	4	1
4	4	3	2	3	2
5	3	4	3	2	2
4	2	5	4	2	3
5	4	3	4	2	4
5	5	2	5	3	4