

**FACTORS INFLUENCING STOCK PRICES FOR FIRMS LISTED AT NAIROBI
SECURITIES EXCHANGE AFTER INITIAL PUBLIC OFFERINGS IN KENYA**

BY

MUGO PAUL NJOGU

KCA 07/01634

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF MASTERS OF SCIENCE IN
COMMERCE, TO THE SCHOOL OF GRADUATE STUDIES AND RESEARCH,
KCA UNIVERSITY**

OCTOBER 2017

DECLARATION

This research project is my original work and has not been presented to any other examination body. No part of this work may be reproduced without my consent or that of the KCA University.

Student Name:

Student Number:

Mugo Paul Njogu

Reg. No: KCA/07/01634

Sign.....

Date

Declaration by the Supervisor

This research project has been submitted for defense with my approval as the KCA University Supervisor.

Lecturer Name:

Dr. Michael Njogo

Sign.....

Date.....

ABSTRACT

Initial Public Offerings (IPO's) have recently become popular as way of sourcing for funds by organizations and to the investors by buying shares in those companies. However, IPO can be a risky investment avenue because of uncertainty regarding the future prices of the shares. For the individual investor, it is difficult to predict how the stock or shares performed on its initial day of trading and in the near future since there is often little historical data with which to analyze the company and into which to base or guide the investor while making investment decisions. The study targeted 9 companies that had IPO during the period 2006 to 2015. The main objective of the study was to determine the factors influencing stock market prices of companies listed at NSE after IPO's in Kenya. The study was guided by the following specific objectives: to determine the effect of Earning per Share on stock market prices of companies listed at NSE after IPO's in Kenya; to establish the effect of Dividend Policy on stock market prices of companies listed at NSE after IPO's in Kenya; to ascertain the effect of Liquidity of the firm on stock market prices of companies listed at NSE after IPO's in Kenya; to ascertain the effect of Size of a firm on stock market prices of companies listed at NSE after IPO's in Kenya. A correlation research design was undertaken in the study and secondary data collected from annual statements of the nine companies for the period of study. The study established that in view of significance at 0.05, the study documents that the main significant predictors of share prices after IPO for listed firms are DPS ($p=0.022$) and EPS ($p=0.000$) which are all less than 0.05. Also the Liquidity and the firm size have a positive relationship with the firms' share price. The study concludes and recommends that upon listing of the firms on the NSE, should evaluate their dividend policy. The firms listed on NSE should enhance their EPS by investing in viable projects that increase the earnings. Listed firms on the NSE should regularly pay dividends to their shareholders on the income generated from investment projects.

Key words: Market stock prices; Initial Public Offering; Dividend Policy; Earning per Share

ACKNOWLEDGEMENT

All thanks to God for the gift of life he has bestowed upon me, and for making possible what seemed impossible at certain times in my life and for seeing me through the whole of this project process. Without Him, I would not have made it to see this day. I also acknowledge my supervisor Dr. Michael Njogo, whose intellectual support and insightful guidance has seen this research project come out better. I also thank my colleagues in college for their insights during the research project process. The discussions we had on this topic shaped the course which the project took. Lastly, I thank my family members- my late dear wife Hannah and my three lovely daughters Ciru, Ciku and Sarah Liz for being supportive all through. Their prayer and support, both financially and mental has seen me go this far.

TABLE OF CONTENTS

DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENT	iv
DEDICATION	vii
LIST OF FIGURES	viii
LIST OF TABLES	ix
ABBREVIATIONS	x
DEFINITION OF TERMS	xi
CHAPTER ONE: INTRODUCTION	1
1.1 Backgrounds to the Study	1
1.2 The Statement of the Problem.....	6
1.3 Objectives of the Study.....	8
1.4 Research Questions.....	8
1.5 Justification of the Study	9
1.6 Significance of the Study	9
1.7 The Scope of the Study	10
CHAPTER TWO: LITERATURE REVIEW	111
2.1 Introduction.....	111
2.2 Theoretical Review	111
2.3 Empirical Review.....	155
2.4 Research Gap	20
2.5 Conceptual Framework.....	222
2.6 Operationalization.....	233
CHAPTER THREE: RESEARCH METHODOLOGY	24
3.1 Introduction.....	244
3.2 Research Design.....	244
3.3 Target Population.....	244
3.4 Sample Size and Sampling Technique.....	243
3.5 Research Instruments	255
3.6 Data Analysis	255
3.7 Model Specification	27

CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION	288
4.1 Introduction.....	288
4.2 Exploratory Data Analysis.....	32
4.3 Diagnostic Tests.....	32
4.4.1 Panel Data Descriptive Analysis.....	333
4.4.2 Panel Data Regression Analysis	334
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	366
5.1 Introduction.....	366
5.2 Summary of the Findings.....	366
5.3 Conclusion of the Study.....	388
5.4 Recommendations for Further Studies.....	389
5.5 Limitation of the Study	399
References.....	40
APPENDICES	44
Appendix I: Initial Public Offers Kenya (IPOs) 2006-2015	44
Appendix II: Work Plan.....	455
Appendix III: Budget.....	466
Appendix IV: Data for the Study	47

DEDICATION

I dedicate this project to my family and friends

LIST OF FIGURES

Figure 2.1: Conceptual Framework	22
Figure 4.1: Growth Pattern for each Firm Share Price	229
Figure 4.2: Overlain Share Price.....	22

LIST OF TABLES

Table 2.1: Operationalization of Variables	233
Table 4.1: Multi-co linearity Test.....	32
Table 4.2: Durbin Watson test statistics	32
Table 4.3: Heteroscedasticity Tests	33
Table 4.4: Information Criteria	33
Table 4.5: Type III Tests of Fixed Effect	34

ABBREVIATIONS

CBK	Central Bank of Kenya
CMA	Capital Market Authority
IPO	Initial Public Offering
Kshs	Kenya Shillings
NSE	Nairobi Securities Exchange

DEFINITION OF TERMS

Initial Public Offering

Initial Public Offering occurs when a company sells its shares or stock to the public for the first time (Gregoriou, 2006).

Market

Market means a place where trade transactions of exchange take place. There are organizations that facilitate the trade in financial securities, like a stock exchange or commodity exchange. This may be a physical location like Nairobi Securities Exchange (Gregoriou, 2006).

Stock Market Value

Stock Market Value means the market price of the stock. It is the price at which investors buy or sell a share of common stock or a bond at a given time. Market value is determined by the interaction between buyers and sellers. The current market price of a security is indicated by the latest trade recorded (Farwell & Leffler 1963).

Nairobi Securities Exchange

Nairobi Securities Exchange is a market which deals in the exchange of shares of publicly quoted companies, and government and corporate bonds among other instruments for money (NSE, 2015).

Capital Market Authority

Capital Market Authority is the authority charged with responsibility of safeguarding the investors` interests by ensuring that various regulations on capital market are followed and adhered to. This is a market that brings together lenders (investors) of capital and borrowers (companies that sell securities to the public) of capital (CMA, 2015).

The Prospectus

The Prospectus is the primary document in communicating information about the quality and potential of the firm. A high disclosure level decreases information asymmetry between the firm and the investors (potential investors) and therefore leads to a lower risk in the investment (CMA, 2015).

CHAPTER ONE

INTRODUCTION

1.1 Backgrounds to the Study

Initial public offering (IPO) is when firms issue shares or common stock to the public for the very first time (Gregoriou, 2006). The extent to which public information is incorporated into the pricing of an IPO is a matter of recent debate. Many factors affect market share prices of listed companies after initial public offerings. Stock prices changes after IPO's have shown that most stocks of companies fetch higher, lower or remain stable in comparison with the offer price of respective companies just before IPO (NSE Handbook, 2008). Returns from share investments are expected to vary owing to the movement of market share prices that depends on various factors that could be either internal or firm specific like; earnings per share, dividends and book value or external factors such as interest rate, GDP, inflation, government regulations and Foreign Exchange Rate (FOREX). Share price is used as a benchmark to gauge performance of a firm and its variations as an indicator of the economic health or otherwise of a firm hence the need to be conversant with the factors that could adversely affect share prices.

An initial public offer IPO is one of the most significant cycles in a firm's cycle as this facilitates accessibility to sources of finances that drives growth of the firm. Through an IPO, a firm is able to access public equity market platforms that drive future growth. According to Edmonston (2009), an IPO is where a firm sell to public equities for the first time so as to raise finance for specific purpose for example growth. An IPO brings about transformation of a private into a public company (Edmonston, 2009). During the issue of IPO, the public are invited to participate and the formula of allotting shares is clearly stated. There are certain costs that a firm incurs in the process of IPO issue which can be direct or indirect costs. Direct costs include underwriting fees and auditors fee while in direct costs include the time spent by management in advertising for the IPO before the actual issue. IPOs help companies to enhance their liquidity positions and expand their accessibility to capital (Berk, Demarzo & Jarrad, 2013).

The other common terms that describe IPO include going public or floatation. Initial public offerings IPOs are normally floated through security exchange markets. These security markets can either be efficient or inefficient. An efficient security market is

based on the Efficient Market Hypothesis as indicated by Fama (1970). However, according to Chuvakhin (2000), security exchange markets are not as efficient as indicated by the EMH but rather relatively efficient. Companies usually issue IPOs at predetermined price which can be undervalued or overvalued based on how shareholders will react. When a firm under prices its share prices, this means that the share price is priced at lower value than the market value.

According to Gajewski and Gresse (2006) firms normally price their IPO below the market value to improve the secondary market liquidity, for shareholders to maximize the sale price, to manage litigation risk and to solve information asymmetries. After an IPO, the share price may either go up or reduce and this is likely to affect the share returns of the share holders. During the past years the global equity markets have been characterized by increased interest into IPO issues, with investors in the Kenyan market experiencing over-subscriptions when it comes to IPO applications. From an investors' point of view, the IPO issues are an opportunity to maximize gains and profits as they penetrate into the equity investments (French, 2008).

Share prices are highly affected by the business fundamentals, which are either economic or political. These are factors that affect the share prices but are outside the share market itself. The many traders and investors in the market are at all times seeking to know the trend of the share prices. Good dividend payouts indicate that companies are generating real earnings and they are not giving a false picture of the reality. This in turn leads to higher firm value as share prices increases to reflect higher dividend payouts after first shares are initially sold by a company. Announcements of initial share offering leads to positive average abnormal returns that are statistically significant.

The changes in stock prices in the Nairobi Securities Exchange after initial public offering have shown that most stocks of companies fetch higher, lower or remain stable in comparison with the offer price of the IPO (NSE Handbook 2008). Kenyans have in the recent years taken a lot of interest in investing in the financial markets. A financial market is a market in which people and entities can trade financial securities, commodities, and other valuable items at low transaction costs and at prices that reflect supply and demand (Vincent, Ongore & Kusa, 2013). Financial markets have evolved significantly over several years and are undergoing constant innovation to improve liquidity.

The earnings per share EPS of the firm indicates the return to outstanding shareholders of the company as a result of their investment in shares. Stability of an EPS is a significant determinant of the share prices after IPO (Baker & Haslem, 2015). The dividend policy of the firm on the other hand is determined by the amount of cash flow stream from an investment. Some firms strive to strike a balance between the amount set aside for dividends to shareholders and the retained amount for future investments.

If a financial system is well-developed, it will enhance investment by identifying and funding good business opportunities, mobilize savings, enable the trading, hedging and diversification of risk and facilitate the exchange of goods and services (Vincent et al. 2013). The Financial markets perform a wide range of economic and political function while offering trading, investment, speculation, hedging, and arbitrage opportunities. In addition, they serve as a mechanism for price discovery and information dissemination while providing vehicles for raising finances for companies. Financial markets attract funds from investors and channel them to corporations. They thus allow corporations to finance their operations and achieve growth. Money markets allow firms to borrow funds on a short term basis, while capital markets allow corporation to borrow on long-term funding to support expansion.

1.1.1 Initial Public Offering (IPO)

Initial public offering (IPO) is when a company issues common stock or shares to the public for the first time (Gregoriou, 2006). Lowry & Schwert (2002) define Initial Public Offer (IPOs) as the first sale of stock by a company to the public. They are often issued by smaller, younger companies seeking capital to expand, but can also be done by large privately-owned companies looking to become publicly traded. Initial Public Offerings (IPO) involve problems regarding price discovery due to uncertainties regarding aggregate demand and the quality of the issuer. Lowry and Shu (2002) observed that pricing of IPOs have become a daunting task due to obscurity of discovering an appropriate comparable firm, the market is not certain about the quality of the IPO firm, while the issuing firm and its underwriter do not know the demand for IPO shares.

In an IPO, the issuer may obtain the assistance of an underwriting firm, which helps it determines the type of security to issue, best offering price and time to bring it to market. IPO's involve one or more investment banks as underwriters. The company offering its shares, called the issuer enters into a contract with a lead underwriter to sell its shares to

the public. The underwriter then approaches investors with offers to sell these shares. Upon selling the shares, the underwriters charge a commission based on a percentage of the value of the shares sold with individual investors, which is a key incentive for many companies seeking to list. Usually, the offering will include the issuance of new shares, intended to raise new capital, as well as the secondary sale of existing shares, (Benninga, Helmantel & Sarig, 2005).

The extent to which public information is incorporated into the pricing of an IPO is a matter of recent debate. Loughran and Ritter's (2002a) findings suggest that public information is only partially incorporated into the offer price, even though Benveniste and Spindt (1989) would not predict this. In fact, this partial incorporation of public information seems to suggest that the IPO pricing process is not efficient. In Kenya there are many companies which have carried out IPO's and the following are the ones which have done so from the year 2006 to 2015 namely KenGen, AccesKenya Group, Scan group, Eveready East Africa Ltd., Kenya Re, Safaricom, Cooperative Bank, British-American Investment Co. and NSE. The listing of KenGen in the year 2006 crowned a successful government campaign to promote share ownership among the ordinary people that brought renewed interest in capital markets and drew many investors to the stock market for the first time, (NSE 92015).

The Safaricom Ltd attracted the highest number of prospective buyers about 860,000 in Kenya's IPO history. The 10 billion shares that were put on sale were oversubscribed by a massive 453 per cent forcing a reduction in the number of minimum shares allocated to individual applicants. The Safaricom refund was in total mess because as at 20th August 2008, at a total of Kshs 1.67 billion out of the total refunds amounting to Kshs 92 billion had not been refunded to the investors according to the statistics from the Central Bank of Kenya. The performance of the shares in the stock market in Kenya after IPO's vary from the time of the first trading and thereafter in comparison with the offer price. The trend of the share prices after the IPO's could be higher, lower or stable than the offer price (NSE Handbook, 2008). Hence the need to evaluate the factors influencing the share prices after the IPO 's for the listed companies in NSE, (Kipngetch, Kibet, Guyo & Kipkoskey, 2011).

1.1.2 Changes of Stock Share Price

Returns from equity investments are expected to vary owing to the movement of share prices, which depend on various factors which could be internal or firm specific such as earnings per share, dividends and book value or external factors such as interest rate, GDP, inflation, government regulations and Foreign Exchange Rate (FOREX). Share price is used as a benchmark to gauge performance of a firm and its variations as an indicator of the economic health or otherwise of a firm hence the need to be conversant with the factors that could adversely affect share prices. Share price is the value of the firm divided by the number of shares outstanding. It can also be defined as the price that buyers and sellers establish when they trade in the shares, (NSE Hand Book 2005).

Share prices are highly affected by the business fundamentals, which are either economic or political. These are factors that affect the share prices but are outside the share market itself. The many traders and investors in the market are at all times seeking to know the trend of the share prices, and this trend is mainly based on the fundamental conditions, (Farwell & Leffler,1963). Investors are mainly interested in the returns they get from their investment, therefore, they will always select their investment well so as to fulfill their expectations.

1.1.3 Nairobi Securities Exchange (NSE)

The Nairobi Securities Exchange (NSE) was constituted as Nairobi Stock Exchange in 1954 as a voluntary association of stockbrokers, registered under the Societies Act. In Kenya, dealing in shares and stocks started in the 1920s when the country was still a British colony. However, the market was not formal as there were no rules and regulations to govern stock broking activities. Trading took place on a 'gentleman's agreement.' Standard commissions were charged with clients being obligated to honor their contractual commitments of making good delivery and settling relevant costs. The NSE is a member of the African Stock Exchanges Associations (ASEA). It is Africa's fourth largest stock exchange in terms of trading volumes, and fifty in terms of market capitalization as a percentage of GDP. The Exchange works in cooperation with the Uganda Securities Exchange and the Dar Es Salaam Stock Exchange including the cross listing of various equities (NSE Handbook ,2008).

In May 2006, NSE formed a demutualization committee to spearhead the process of demutualization. Demutualization is the process through which a member-owned company becomes shareholder-owned. It is sometimes called stocking or privatization. The NSE has already demutualised itself, that is, the shares of the NSE Ltd are now tradable on the stock exchange itself. The purpose of this is to separate ownership from management of the NSE while keeping along with global trends. On June 27, 2014, the Capital Markets Authority approved the listing of the NSE stocks through an IPO. The IPO opened on July 24, 2014 and ran up to August 12, 2014. The listing made the NSE joins the Johannesburg Stock Exchange in being the only exchanges in Africa that are self-listed. The NSE IPO was oversubscribed by 763.92% making it the most oversubscribed share offer in the NSE's 60-year history. The NSE shares started trading on the Main Investment Market Segment of the exchange on September 9, 2014. The NSE currently has 4 indices used to measure the performance of stocks. The NSE all share Index (NASI) that is a weighted index for all the listed companies on the exchange; the NSE 20-share Index that is a weighted index of 20 blue chip companies using market capitalization, shares traded, number of deals and turnover as criteria for inclusion in the index; the Financial Times Stock Exchange (FTSE) NSE Kenya 25 Index representing the performance of the 25 most liquid stock trading on the NSE and the FTSE NSE Kenya 15 representing the performance of the largest 15 stock trading on the NSE, ranked by full market capitalization, (NSE, 2016).

1.2 The Statement of the Problem

Kenyan investors have expressed great interest in investing in equities especially IPO's as evidenced by the level of over-subscription as witnessed on the number of IPO's issued. Initial Public offerings are the yardsticks of growth of listed firms and for the economy as a whole. Listed firms are in position to access funds needed for investment through IPOs. In Kenya, for example, the IPO by Safaricom Ltd put on sale 10 Billion shares that attracted the highest number of prospective buyers about 860,000 in Kenya's IPO history. IPOs help investors earn returns in form of dividends that help in furthering economic development of the country. This indicates the significant role of IPOs towards economic development of the country. Despite this significant role played by IPOs towards national growth and development, little attention has been paid to determine the factors

that affect share prices after IPOs so as to enhance the returns for investors to grow the economy of the country.

Various studies have been done to determine the factors that affect share prices returns. Suret and Kooli (2004) explored the aftermarket performance for a period of five years after the listing of 445 Canadian IPOs listed at the Toronto Stock Exchange (TSE). Goergen et al. (2007) examined a total of 252 IPOs on firms listed at the London Stock Exchange.

Mahmood, et al. (2011) examined the IPO under-pricing and aftermarket performance for two windows of crises (Asian financial crises 1997-1999 and global financial crisis 2007-2009) in Chinese stock market. Sample of 626 companies and a market adjusted return model were used. Results indicated that in the recent global economic crisis IPO activity is on shrinking trend and there is 10% increase in average under-pricing as compared to last Asian financial crisis. Tsangarakis (2004) studied price performance of IPO's in Greece, in the long-run where he considered the long-run within the first year of trading.

Locally, Waweru (2010) sought to establish if there exists a relationship between stock prices and news of an IPO at NSE. Kiluku (2014) explored the relationship between initial public offer price and the post listing market price at the Nairobi Securities Exchange for listed state owned enterprises. Chibeka (2014) sought to determine the effects of initial public offering pricing on the long run stock returns of companies listed at the NSE. Odongo (2012) explored mispricing and long run performance of IPO's at the Nairobi Securities Exchange. Wairia (2010) in his long-run analysis of initial public offering in NSE did an annual analysis for the 3rd, 4th and 5th year of trading. The study established a long-run under-performance. Simiyu (2008) conducted study on pricing and performance of IPO-a comparison between states owned enterprises and privately owned at NSE. Simiyu (2015) conducted a study on the long run performance of IPOs for firms listed at NSE and concluded that after the issuance of IPO stocks performed fairly well in the first 3 years of trading. During the 4th year of trading the stock under-perform but later on performed well. Mwendwa (2014) examined the effects of initial public offering on long-run stock price performance of companies listed at the Nairobi Securities Exchange.

Although, most of previous studies of IPOs are based in developed markets such as the US, Europe and Asia, the studies done in Kenya majorly concentrated on the effects of

initial public offerings on performance of the company. The yearly long-run studies for the past 8 years on factors influencing stock prices after IPO have not been conducted in Kenya for firms which had issued initial public offering from the year 2006 to 2015, hence forming the research gap. This research will analyze factors influencing stock prices after IPO and the effects those factors have on long run performance for the past 8 years of trading to establish whether this study results are similar to those done on long-run performance of IPO's both locally and internationally. This study sought to fill this research gap as it undertook to reveal the various factors that influence share prices of listed companies after IPO at Nairobi Security Exchange.

1.3 Objectives of the Study

1.3.1 General Objective

The main objective of the study was to determine the factors influencing stock market prices of companies listed in NSE after IPO's in Kenya.

1.3.2 Specific objectives of the study

Specific objectives of the study were to: -

- i. To establish the effect of Dividend Policy on stock market prices of companies listed at NSE after IPO's in Kenya.
- ii. To determine the effect of Earning per Share on stock market prices of companies listed at NSE after IPO's in Kenya.
- iii. To determine the effect of Liquidity of the firm on stock market prices of companies listed at NSE after IPO's in Kenya.
- iv. To ascertain the effect of Size of a firm on stock market prices of companies listed at NSE after IPO's in Kenya.

1.4 Research Questions

The study was based on the following research questions:

- i. How does Dividend Policy of the firm influence stock market prices of companies listed at NSE after IPO's in Kenya?

- ii. What is the effect of EPS on stock market prices of companies listed at NSE after IPO's in Kenya?
- iii. How does Liquidity of a firm influence stock market prices of companies listed at NSE after IPO's in Kenya?
- iv. What is the Size of a firm on stock market prices of companies listed at NSE after IPO's in Kenya?

1.5 Justification of the Study

The stock market is seen as a very significant component of the financial sector of the economy. The study sought to evaluate the factors influencing share prices of listed companies after the IPO to provide the investors; government regulators' and other stakeholders with relevant information. Many factors have an effect on market share prices of listed companies at the NSE after IPO's. The changes in stock prices in the NSE after IPO's have shown that most stocks of companies fetch higher, lower or remain stable in comparison with the offer price of the IPO. This study would therefore add to existing literature with regards to the influence of various identified factors on share pricing after IPO's. Research findings from this study would therefore add to the body of knowledge regarding share pricing in the developing economies.

1.6 Significance of the Study

The study would have varying benefits to various stakeholders in the economy all together to enhance better share pricing.

The study would give guidelines to investors to enhance their understanding of the factors influencing stock market prices after IPO's. This would assist the investors in making viable decisions while investing in the stock market leading to reducing risk exposure.

The market regulators namely the CMA & NSE would gain knowledge on how to handle future IPO's in regard to the regulations and making of policies. Due to making sound regulations and policies, this would result into improved confidence in investors in investing in the stock market.

Companies would be able to appreciate the factors influencing the market prices after IPO's, and this would assist them in making sound decisions when to float their shares

through IPO's. They would make viable decisions when setting the offer price of shares during IPO's. The study would establish the link between the dividends policy and the market values. The management of companies would also make policies in regard to the corporate governance in running the affairs of the organizations.

Information obtained by this study would be useful to future researchers who want to advance the knowledge and literature of the company stock market values after IPO.

1.7 The Scope of the Study

This study evaluated the factors influencing the stock market prices after IPO's of listed companies in NSE from the year 2006 to 2015 because most of the IPO's in the Kenya's history were carried out during this period. The study targeted a population of nine companies that have carried out IPO during the period 2006-2015. These companies are Acces Kenya group, Safaricom, Scangroup, Kengen, Kenya Reinsurance Corporation, Co-operative bank, Eveready, British-American Investment and NSE (Appendix I).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses literature review that is related to the study based, in essence the theoretical framework and empirical review of the factors influencing stock market prices of firms listed in the NSE after initial public offers (IPOs) in Kenya will be covered. The theoretical framework focuses on the Random Walk Theory, Dividend Relevance Theory, Liquidity Preference Theory and Signaling Theory. The empirical review shall be concerned with the factors influencing stock market prices of firms listed in the NSE after IPOs in Kenya in relation to EPS, Dividend Policy, Liquidity and Size of the firm.

2.2 Theoretical Review

Theoretical frameworks are critical in deductive, theory-testing studies. In this section, the study discusses the various theories that underpin the study. Specifically, the Random Walk Theory, Dividend Relevance Theory, Liquidity Preference Theory and Signaling Theory are discussed.

2.2.1 Random Walk Theory

The Random Walk Theory gained popularity due to the works of Malkie (1973). The random walk theory is a stock market theory which puts on the assumption that past movement of stock prices as well as overall markets cannot be used to forecast future stock prices movement (Burton & Malkiel, 1973). The theory further assumes that stock price fluctuations are in essence independent of each other in that they have the same probability distribution. However, the theory assumes that stock prices will have an upward trend over a period of time. According to the theory, market prices follows an up and down random path which is not influenced by past price movements. This therefore makes it impossible to forecast with accuracy the direction in which markets will likely move at a point in time.

In simple terms, the theory claimed that stock prices follow a random walk which cannot be estimated through examination of historical price information particularly in the short term. Malkiel (1973) stated that, the adoption of the long-term buy-and-hold strategy is the best strategy that individuals can use and that they should not try to time markets in

anticipation of certain trends. In addition, the making of attempts on the basis of fundamental, technical, or any form of analysis is in essence futile.

According to Fama (2000), the context in the stock markets does not imply that the movements of price are chaotic and whimsical. On the contrary, what it implies is that there are periodic price changes that are un-forecast-able and statistically independent, they cannot be properly anticipated. In essence, price movements are due to perfectly lucid response to information, however, it should be anticipated that new information is non-random thereby price changes as a result of this information are also supposed to be uncorrelated and random to any apparent trend over time.

This theory is relevant to the current study as indicates the movements in share prices predict the future movements of share prices. Predictions in share price movements are based on a number of factors for example issue of IPOs. The theory therefore helps in explaining whether the identified factors play significant role in determining the movements in share prices especially after IPOs.

2.2.2 Dividend Relevance Theory

The theory was postulated by Gordon (1963). The theory suggests that investors are generally risk averse and would rather have dividends today (“bird-in-the-hand”) than possible share appreciation and dividends tomorrow. Dividend relevance theory proposes that dividend policy affect the share price. Therefore, according to this theory, optimal dividend policy should be determined which will ensure maximization of the wealth of the shareholders. If the choice of the dividend policy affects the value of a firm, it is considered as relevant. In that case a change in the dividend payout ratio will be followed by a change in the market value of the firm. If the dividend is relevant, there must be an optimum payout ratio. Optimum payout ratio is that ratio which gives highest market value per share.

James (2001) argues that the choice of dividend payout ratio almost always affects the value of the firm. He studied the significance of the relationship between internal rate of return (R) and cost of capital (K) in determining optimum dividend policy which maximizes the wealth of shareholders. Walter’s model is based on the following assumptions: The firm finances its entire investments by means of retained earnings only, internal rate of return (R) and cost of capital (K) of the firm remains constant, the firms’

earnings are either distributed as dividends or reinvested internally, 11 the earnings and dividends of the firm will never change and the firm has a very long or infinite life.

They said that dividend policy does affect the value of firm and market price of shares. Investors always prefer secure and current income in the form of dividends over capital gains. Lack and Scholes (1974) found no relationship between dividend policy and stock prices. Their results further explain that dividend policy does not affect the stock prices and it depends on investors' decision to keep either high or low yielding securities; return earned by them in both cases remains the same. Empirical studies do not support dividend relevance theory. However, actions of market participants tend to suggest that there is some connection between dividend policy and share price.

This theory is found suitable for this study because risk averse shareholders of a firm will prefer to be paid dividend today than wait for future capital gains. However, a firm can only pay dividend within the designed dividend policy which has an effect on share prices after IPO.

2.2.3 Liquidity Preference Theory

The liquidity preference theory was formulated by Keynes (1964). The theory suggests that liquidity preference entails the degree to which individuals prefer cash over less liquid assets. It basically entails individuals' ease of holding cash. The theory suggests that, holding all other things equal, investors actually prefer liquid investments in comparison to illiquid ones. Investors prefer cash as it results to a resultant demand in premiums after they fortify their cash by adopting illiquid investments (Choudhry, 2011). Liquidity is cash money whereas liquidity preference is people liking for cash money.

According to the theory, investors prefer short-term securities in comparison to long-term securities. Encouragements to hold long term bonds are due to the notion that there will be higher interests compared to short-term bonds. The result is that the yield curve will always have an upward slope. Important to note is that long term bonds yields more compared to short term bonds. This is due to various reasons that are; investors prefer to clasp onto short term securities since they are more liquid and that they can be easily converted to cash with modest dangers of loss of engaged principals. Simultaneously, borrowers tend to react in the reverse direction in that they prefer long term debts

compared to short-term debts since the latter exposes them to the risk of having to repay the debt under adverse condition.

This theory explains how a firm can enhance its liquidity position which definitely has an influence on share prices especially after an IPO. The theory suggests that a firm can enhance its liquidity position by holding more short term securities as opposed to long term securities.

2.2.4 Signalling Theory

This theory as forwarded by Ross (1978) based on asymmetric information problems between well-informed managers and poorly informed outsiders. Corporate executives with favorable inside information about their firms have an incentive to convey this positive information to outside investors in order to cause an increase in the firm's stock price. Hence managers of high value firms signal information to investors by adopting some financial policy. Ross (1977) shows that managers of high valued firms will adopt a heavily levered capital structure for their companies. Less valuable companies are unwilling to assume so much debt because they are much more likely to fall into bankruptcy.

Thus a separating equilibrium occurs where high valued firms use a great deal of debt financing and less valuable companies rely more on equity financing. Investors are able to send the signal due to market imperfections which result in market prices not reflecting all information, especially that which is not publicly available. As a result, increased leverage implies a higher probability of bankruptcy, and since management will be penalized contractually if bankruptcy occurred, investors conclude they are optimistic about the future prospects and this cause share prices to rise. Accordingly, capital structure does not cause changes in valuation, rather it is signal conveyed by the changes that is significant. Therefore, what is valued is the market's perception of the value of the firm.

This theory is relevant to this study because different actions taken by management of a firm affects the share prices especially after an IPO. This is because such actions as expansion and heavy capital investments (which grows the size of the firm) sends positive signals in the mind of shareholders after an IPO that the firm is doing fine.

2.3 Empirical Review

This section looks at the various empirical studies regarding the factors that affect share prices of listed companies. In essence, the influence of EPS, DPS, Liquidity, and Size on share prices will be discussed extensively.

2.3.1 Earnings per Share and Share Prices

Islam, Khan and Adnan (2014) sought to determine how EPS affects stock prices and the value of the firm. This was a hypothesis testing study. The data was collected using both primary and secondary sources. Data analysis was done using Excel software. The study established that share price does not move as fast as the EPS move. The study further established that the share price movement depends on micro and macro economic factors on the economy. The study recommends that investors must consider other factors as well as EPS in order to invest in the security market.

A study was conducted by Pushpa and Sumangala (2012) to establish how EPS impacts on market value of Equity share. The study was carried out in India. The study used 50 companies as sample size of a period of 5 years. The study revealed that EPS affects the market value of equities in Indian stock market. In South Africa, Robbete, de-Villiers, and Harmse (2016) assessed the effect of earnings per share categories on share price behavior. This study was conducted in South Africa. The study sampled 40 listed firms in South Africa and data was examined over 2005-2013. The findings of the study indicated that basic EPS correlated best with the changing behavior of share prices. Furthermore, the study established that EPS proved to deliver lower correlation coefficients with share prices.

In a study by Kalama (2013) to determine the relationship between EPS and share prices of listed firms on the NSE, using a sample of 42 firms. The data for the study was collected over the period 2007 to 2012. The findings of the study indicated that there was a positive significant relationship between earnings and share prices of firms quoted at the Nairobi Securities Exchange (NSE). It was also found that there were other variables significantly correlated with share price. These variables included DPS and PBV which were used as control variables in the study.

Murugesu (2013) sought to determine the effect of earning Per Share (EPS) on Share Price (Listed Manufacturing Companies in Sri Lanka). The firm's investment and

financing decisions are unavoidable and continuous. In order to make them rationally, the firm must have a goal. Correlation and regression were used to find out the impact of earning per share on share price. Analyzed results revealed there is strong positive relationship between Earning per share and share price. Further earning per share can explain 89.7% on share price of ten sample manufacturing companies in Sri Lanka.

2.3.2 Dividend Policy and Share Prices

Masum (2014) assessed on the dividend policy and its impact on stock price – a study on commercial banks listed in Dhaka stock exchange. This paper empirically estimates excess stock market returns for all the thirty banks listed in Dhaka Stock Exchange for the period of 2007 to 2011. The study used panel data approach in explaining relationship between dividends and stock prices after controlling the variables like Earnings per Share, Return on Equity, Retention Ratio have positive relation with Stock Prices and significantly explain the variations in the market prices of shares, while the Dividend Yield and Profit after Tax has negative, insignificant relation with stock prices. Overall results of this study indicate that Dividend Policy has significant positive effect on Stock Prices.

Mutwiri (2011) investigated the effect of dividend payout ratio on share prices of nonfinancial firms quoted on the Nairobi securities exchange. The study adopted a descriptive research design targeting secondary data collected from NSE for all the non-financial trading companies listed in NSE, which informed the study. The study found that that dividend payout ratio affects the share prices of non-financial firms quoted in NSE. This study therefore recommends diligence in the handling of dividend payout information among the sector players in a bid to ensure that there is inclusivity of the stock market stakeholders.

Ahmed (2011) conducted a study on the relationship between dividend per share and firm value on companies listed on the NSE. The target population was all the 55 companies listed on the NSE for the period from 2005 to 2009 and only companies that have continuously paid dividends and met researcher requirements were sampled. Secondary data was used for the study and data sourced from NSE hand book and data base. Multiple regression statistical method was used to analyze the data. He concluded that there was a positive between dividend payout and value of companies

Ratib (2013) conducted a study on effect of bonus share issues on stock returns of firms listed at the NSE. The study employed event study methodology where the impact of bonus shares on stock prices was measured over the five-year period from 2008 to 2012. From the findings the study showed that bonus issue announcements led to statistically significant positive average abnormal returns around the announcement dates. This means the Kenyan market reacted positively to bonus issue announcements.

2.3.3 Liquidity and Share Prices

A study was conducted by Briggeman, Langemeier and Russell (2013) to assess the impact of liquidity and solvency on cost efficiency for a sample of Kansas farms. The study modified the standard cost-efficiency model was to incorporate liquidity and solvency ratios. Tobit regressions were used to determine the impact of firm characteristics on improvements in efficiency. The study established that liquidity and solvency measures have a significant impact on improving cost efficiency. Companies with larger expenditures on purchased inputs relative to capital were less likely to improve efficiency when liquidity and solvency were considered.

Khidmat and Rehman (2014) studied the impact of liquidity and solvency on profitability of chemical sector of Pakistan. The population of the study included comprised of 36 chemical companies and from these, 10 of them were selected by the researcher. The data of the study covered a period of 9 years from 2001 to 2009. The study found out that solvency ratio has negative and highly significant impact on the ROA and ROE and this implies that debt to equity ratio increases then performance decreases. It is also concluded that liquidity has high positive effect over Return on Assets of sector i.e. if liquidity Rate is increased, ROA will also be increased with greater effect and vice versa.

Ehiedu (2014) examined the Impact of Liquidity on Profitability of Some Selected Companies, using the Financial Statement Analysis (FSA) Approach. The study adopted quantitative research design and the population consisted of listed firms that make up domestic/industrial industry. The study established that there was a significant positive correlation between current ratio and profitability, there was no definite significant correlation between Acid-test ratio and profitability and lastly that there was no significant positive correlation between return on capital employed and profitability. The researcher recommends that corporate entities should not pursue extreme liquidity policies at the expense of their profitability.

Banafa et.al, (2015) investigated the effect of liquidity on financial performance of non financial firms in Kenya. The study used causal research design and the target population constituted 42 listed non-financial firms at the NSE under different categories. The researchers used secondary panel data contained in the annual reports and statements of financial positions of listed non-financial companies. The results were presented using descriptive statistics and inferential analysis. The results of statistical tests show that liquidity, has positive effect on corporate performance (ROA). The study recommends that financial managers must decide both how much liquidity to hold and the way in which they hold this liquidity.

2.3.4 Size of the Firm and Share Prices

Li (2011) examined the effects of firm size, financial leverage, and R&D expenditures on firm earnings. Using the quintile regression (QR) approach, the study analyzed S&P 500 firms from 1996 to 2005. The study found that the effects of firm size, financial leverage and research and development expenditures on firm earnings differ considerably across earnings quintiles. The study concluded that there exists a positive relationship between firm size and financial leverage.

Vithessonthi (2015) surveyed the effect of firm size on the leverage–performance relationship during the financial crisis of 2007–2009 in Thailand. From a data set of 496,430 firm-year observations of a sample of 170,013 mostly private firms, the study found that the magnitude of the effect of leverage on operating performance is no monotonic and conditional on firm size. Panel regression results indicate that leverage has a negative effect on performance across firm size subsamples, year-by-year while cross-sectional regression results show that the effect of leverage on performance is positive for small firms and is negative for large firms. Further, the findings observed that about 75% of Thailand firms have managed to get through the global financial crisis on the basis that they do not have to simultaneously deleverage and liquidate their assets.

Kithuka (2013) did a study on the relationship between firm size and financial innovation of firms listed at the Nairobi Securities Exchange. The study used a descriptive survey research design. The study did a sample of 40 firms which were chosen using stratified random sampling. A regression model was used for analysis and the results showed that there was a positive relationship between the firm size and financial innovation of firms listed at the Nairobi Stock Exchange.

Njoroge (2014) studied the effect of firm size on financial performance of pension schemes in Kenya. The study did a descriptive survey between the variables under investigation. The target population for this study was 30 occupational pension schemes in Kenya. The research was carried out using secondary data. The data was collected from annual reports and financial statements. The analysis showed that there was a positive relationship between the firm size and financial performance. Further the results indicated that there was significant market volatility as evident from the NSE index, Treasury bill rate movement and offshore indices.

2.3.5 Share Prices

Okoro and Stephen (2014) conducted a study to investigate the factors that determine stock price movement in Nigeria for the period 2001-2011. Data were collected from the financial statement of 99 listed firms in the NSE. Ordinary Least Square was used to analyze the data. Three proxies were used: EPS, Book Value of Equity per Share and dividend cover. The result revealed that EPS has a positive impact on stock prices. The explained that the magnitude of changes is that increase in the EPS by 1 unit will lead to an increase in the price per share by 0.25 units. They stressed that EPS has the strongest explanatory power in explaining stock prices movement. Sometimes OLS tend to be biased as it does not recognize time factor, and individual firm invariant characteristics.

Gatua (2013) sought to investigate the share price determinants at NSE in Kenya. Data was collected on the seven variables under study for a period of five years (2008 – 2012) and regression analysis was utilized to determine the effect of selected macroeconomic variables on the share prices of seven companies in seven sectors at NSE and the share prices for the companies were analyzed in terms of change in magnitude. The general results indicate that there is no one model to predict share prices at NSE. Only one company, Equity Bank, had a model that could be used to determine share prices based on the variables under study and this could be explained by the fact that the share prices of Equity Bank had a big differential (of Kshs 312.15) with the highest price at Kshs 324.00 and the lowest price at Kshs 11.85 while the share prices of the other companies under study had small differentials with the biggest differential being Kshs 54.25

Sharma (2011) undertook to examine the empirical relationship between equity share prices and the explanatory variables; Book Value Per (BVP) share, Dividend Per Share (DPS), Earnings Per Share (EPS), price earnings ratio, dividend yield, dividend

payout, size in terms of sale and net worth for the period 1993 to 1994 and 2008 to 2009 in India. Using correlation and a linear multiple regression model the results revealed that EPS, DPS and BVP had significant impact on the market price of shares with the former two being the strongest determinants.

Uwuigbe, Olusegun and Godswill (2012) examined the determinants of share prices in the Nigerian stock exchange market. Using the judgmental sampling technique, a total of 30 companies were selected and data (2006 to 2010) collected from the stock exchange and annual reports of the firms. The paper modeled the effects of financial performance, dividend payout and financial leverage on share price of listed firms by using regression analysis. The study concluded that financial performance and dividend payout had a significant positive relation with share prices while financial leverage (proxied by debt-equity ratio) had significant negative influence on the market value of share prices in Nigeria. Further studies could be conducted incorporating the independent variables under current analysis as well as having other internal and external variables.

Waweru (2010) sought to establish if there exists a relationship between stock prices and news of an IPO at NSE. Secondary data (2004 to 2009) was obtained and analyzed using the Comparison Period Return Approach (CPRA). The mean portfolio daily return was calculated for the IPO within the window period. The study found that issuing of IPOs at NSE had both positive and negative effects on daily mean returns. Negative effects (declining mean daily returns) were on the days nearing the IPOs event which were the result of buyer and seller expectation in the market so as to capitalize on the new issue while positive effects (normalcy is restored) were in the days after the IPOs event which were the result of buyer-seller initiated trading. Further research could be carried out on whether other factors combined with the announcement of an IPO could affect share prices and also the effect of stock splits on share prices.

2.4 Research Gap

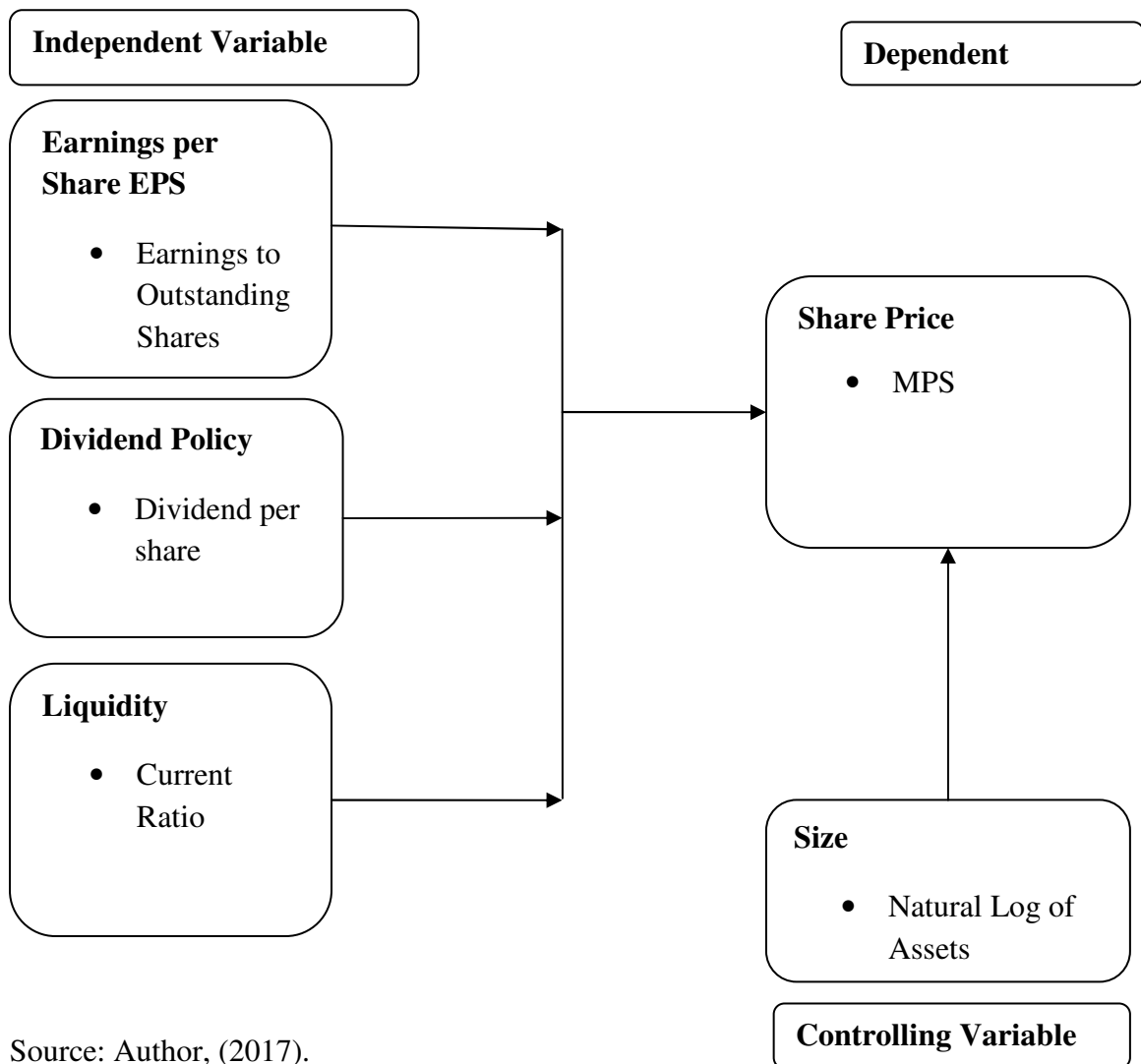
Several studies have been conducted to determine the factors that affect share prices after IPO. Islam, Khan and Adnan (2014) sought to assess how EPS affects prices of stock and the value of the firm. Data analysis was done using Excel software. Pushpa and Sumangala (2012) investigated how EPS impacts on market value of Equity share. The study was done in India and therefore need a similar study in Kenyan context. Robbetze,

de-Villiers, and Harmse (2016) assessed the effect of earnings per share categories on share price behavior and established that basic EPS correlated best with the changing behavior of share prices. However, this study was done in South Africa. In a study to determine the how dividend policy impacts on prices of stock, the study was conducted in the banking sector in Dhaka stock exchange and therefore there is need for a similar study in Kenya among listed firms. Mwitwiri (2011) on the other hand sought to assess effect of dividend payout ratio on share prices of nonfinancial firms quoted on the Nairobi securities exchange; the study concentrated on non financial firms and therefore need a similar study among the listed firms.

Briggeman, Langemeier and Russell (2013) sought to assess the impact of liquidity and solvency on cost efficiency for a sample of Kansas farms. Khidmat and Rehman (2014) studied the impact of liquidity and solvency on profitability of chemical sector of Pakistan. Vithessonthi (2015) surveyed the effect of firm size on the leverage–performance relationship during the financial crisis of 2007–2009 in Thailand. The studies in this paragraph however were not carried out in Kenyan context and therefore need similar studies in Kenya.

2.5 Conceptual Framework

Bogdan and Biklen (2003) opine that a conceptual framework is a basic structure that consists of certain abstract blocks which represent the observational, the experiential and the analytical aspects of a process or system being conceived. To guide the study, the interrelationship between variables discussed in the literature review is presented in the conceptual framework model shown in Fig 2.1.



Source: Author, (2017).

Figure 2.1: Conceptual Framework

2.6 Operationalization

This refers to the way, in which independent variables were measured, indicators of the variables and factors determining the same in the study.

Table 2.1: Operationalization of Variables

Variable	Indicators	Measure	Author
Earnings Per Share EPS	Earnings Per Share after IPO	Earnings/ Outstanding Shares	Kalama (2013)
Dividend Per share	Dividend per share After IPO	Dividend Paid/Number of Shares Outstanding	Masum (2014)
Size of the Firm	Size of Firm after IPO	Natural Log of Assets	Fama and French, K. R. (2012)
Liquidity	Liquidity after IPO	Current Assets/Current Liabilities	Schnabl (2012)
Share price after IPO	Changes in Share Prices after IPO	Market Price per Share MPS	Christiano, Ilut, Motto and Rostagno (2010)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section gives details regarding the procedures to be used in conducting this study. The areas to be discussed are research design, population of the study, sample & sampling techniques, description of data collection and data analysis methods to be used, measurement of variables and the techniques to be used in analyzing the data.

3.2 Research Design

Research design can be defined as the plan according to which research participants are chosen, data is collected and analyzed (Kothari, 2004). The study investigated factors which are important in influencing market prices of listed companies after IPOs which carried out IPOs from the year 2006 to 2015 and laying particular emphasis on their effects to the companies and the shareholders. A correlation research design was undertaken in the study and secondary data collected from annual statements of the nine companies for the period of study. Archival data was used by the study to enable subsequent analysis. Archival data means data for which the original purpose of gathering it was not academic research (Cooper, Schindler & Sun 2003).

3.3 Target Population

Target population is the specific population for which information is desired (Mugenda & Mugenda 2003). The study targeted a population of nine companies that have carried out IPO during the period 2006 to 2015. In Kenya this is the only period when IPO has taken place. To be precise IPO in Kenya has taken place from year 2006 to 2014. These companies were Access Kenya group, Safaricom, Scan group, Ken gen, Kenya Reinsurance Corporation, Co-operative bank Eveready, British-American Investment and NSE.

3.4 Sample Size and Sampling Technique

Sample size is the number of cases or entities in the sample studied (Cooper & Schindler, 2006). The researcher adopted stratified random sampling technique to select the sample size of the study. The 9 firms were stratified depending on the year it carried out its IPO. The researcher purposively picked all those firms which carried IPO on or before the year

2008 in order to eliminate the problem of unbalanced data and this gave a sample size of 7 firms. The researcher collected data for 8 years from the year 2008 to 2015.

3.5 Research Instruments

The study used desk review to collect research data. This method entailed collecting research data from existing resources hence it is a low cost technique in comparison to field research methods (Kothari, 2004). The adoption of desk review was intensive so as to enable a search, review as well as a synthesis of all relevant documents that can reveal sought research data by the researcher. The study collected secondary data relating to the company namely EPS, DPS, Current assets, current liabilities and total assets. Secondary data entails information gathered from already existing sources (Mugenda & Mugenda, 2003). This set of data was acquired from published annual reports and financial statements of the companies for 8 years of trading after IPO, industry analysis, websites, and internet.

3.6 Data Analysis

Data analysis included the following procedure: data cleaning, data analysis, interpretation and report writing. Data was collected through secondary data captured on Microsoft Excel sheets and then imported to STATA statistical packages for analysis. Graphical techniques are used to explore the data. Since data is both cross sectional and time series, we use Panel regression analysis. Diagnostic test for heteroskedasticity, serial correlation and fixed effects were conducted.

Heteroskedasticity is when the variance of the error term along the line of best fit, given the explanatory variables is not constant. Usually, it is assumed that a significance of more than 0.05 indicates that there is no problem of heteroscedasticity while significance level of less than 0.05 indicates a problem of heteroscedasticity.

TABLE 2
Panel Data Diagnostic Tests

Test	Test Used	Conclusion
Use of pooled or random effects model	Breusch Pagan LM test	If P value >0.05, use pooled effects model.

Time Fixed Effects	F statistics	If p value >0.05, there are no time fixed effects do not use two way model or introduce dummy variables
Heteroskedasticity	Modified Wald Test	If P value <0.05, presence of non-uniform variance.
Serial correlation	Wooldridge Drukker test	If P>0.05, no serial correlation
Random or fixed effects	Hausman test	If p value>0.05, use random effects model.

Random effects models assume there are differences in disturbance or the error term while fixed effects model assumes that heterogeneous groups or time had different intercepts. We will use the Hausman test to choose between random effects and fixed effects model which is to be applied in this study. According to Hausman (1978) there will be enough to warrant rejection of the null hypothesis which hypothesis that the model has random effects against the alternative which states that the model had fixed effects.

The resulting model will be used to analyze the factors influencing stock prices for firms listed at Nairobi Securities exchange after initial public offerings in Kenya. The following model was used:

Fitting the pooled OLS, fixed and random effects models will be as follows:

Pooled OLS:

$$Y_{it} = \alpha + \beta X_{it} + \varepsilon_{it} \quad (1)$$

Where ε_{it} = error term

Fixed effects:

$$Y_{it} = \alpha_i + \beta X_{it} + \mu_i + \varepsilon_{it} \quad (2)$$

Where μ_i = fixed effect

Where ε_{it} = error term

Random effects:

$$Y_{it} = \alpha + X_{it}\beta + \mu_{it} + \varepsilon_{it} \quad (3)$$

Where ε_{it} = within entity error term

μ_{it} = between entity error term

From the equations;

Y_{it} = Share Price for i^{th} firm in t^{th} year.

X_{it} = vector representing independent variables (Earning Per Share, Dividend Per Share, liquidity and size) for firm i in year t ,

β = Vector of Coefficients of the independent variables,

α = the intercept for each entity, $i = 1, 2 \dots 7$ (indicator of the listed firms)

$t = 1, 2 \dots 8$ (time indicator)

3.7 Model Specification

To analyze the factors influencing stock prices for firms listed at Nairobi Securities exchange after initial public offerings in Kenya the following models was used:

$$\text{Share Price}_{it} = f(\text{EPS}_{it}, \text{DPS}_{it}, \text{Liquidity}_{it}, \text{Firm size}_{it}) + \varepsilon_{it}$$

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon_{it}$$

Where:

Share_{it}: Share Price i at time t

DPS_{it}: Dividend per share of firm i at time t

EPS_{it}: Earning per share of firm i at time t

Liquidity_{it}: Liquidity of firm i at time t

Firm size_{it}: firm size of company i at time t

ε_{it} : Error term

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

The study sought to establish the factors influencing stock market prices of companies listed at NSE after IPO's in Kenya. The study was guided by the following specific objectives: to determine the effect of Earning per Share EPS on stock market prices of companies listed at NSE after IPO's in Kenya; to establish the effect of Dividend Policy on stock market prices of companies listed at NSE after IPO's in Kenya; to ascertain the effect of Liquidity of the firm on stock market prices of companies listed at NSE after IPO's in Kenya; to ascertain the effect of Size of a firm on stock market prices of companies listed at NSE after IPO's in Kenya. The data used was secondary in nature and the analysis was done using Stata software. Panel data methodologies were used for analysis of the data. Exploratory analysis, diagnostic tests and panel data analysis is presented.

4.2 Exploratory Data Analysis

Prior to examination on factors influencing stock prices for firms listed at Nairobi Securities Exchange after initial public offerings in Kenya, exploration data analysis was carried out through the use of graphical methods primarily to examine the applicability of panel data models or pooled regression analysis. Results of the study were summarized as shown in the Figures below.

FIGURE 4.1

Growth Pattern for each Firm Share Price



4.2 .1 Access Kenya

Figure below shows that the market price per share in the first year was high and thereafter started a declining trend and followed by future stagnant growth.



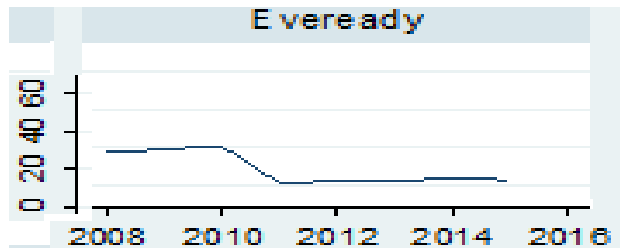
4.2 .2 Co-operative Bank

Figure below shows that the market price per share for Co-operative Bank had an increasing trend on share price in the period under investigation.



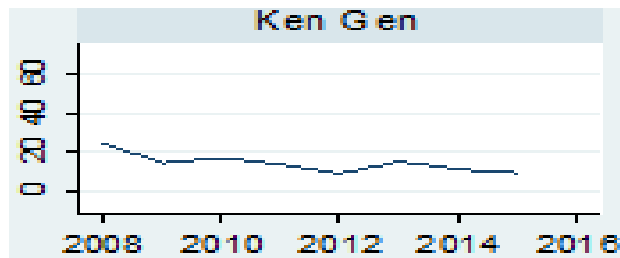
4.2 .3 Eveready

Figure below shows that the market price per share for Eveready had an increasing trend but on 4th year there was a sharp decreasing trend but thereafter the price increased which later flattened at a low price.



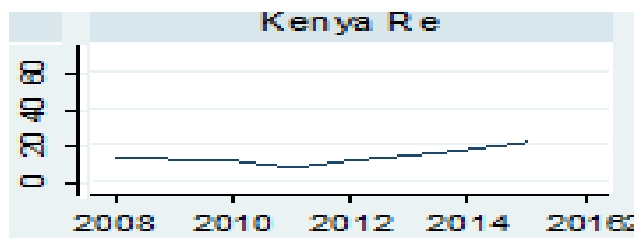
4.2 .4 Ken Gen

KenGen had periodic fluctuations of increase and decrease through the period of study though the first year the price was high followed by decline.



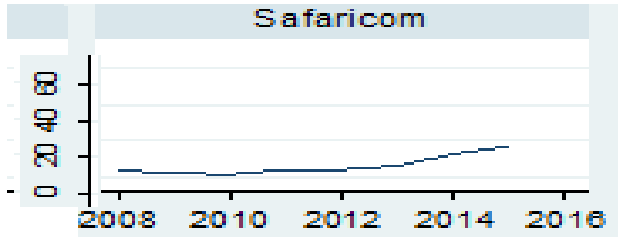
4.2 .5 Kenya Reinsurance

Kenya Re is observed to have an initial price which was high followed by a decline in price up to 4th year but later there was a gradual growth in the share price.



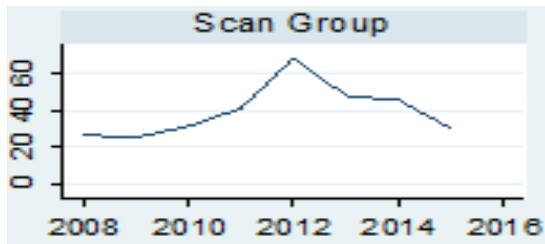
4.2 .6 Safaricom

Safaricom initial share price was high followed by a decline on 2nd and 3rd year followed by a consistent growth in the period under study.



4.2 .7 Scan Group

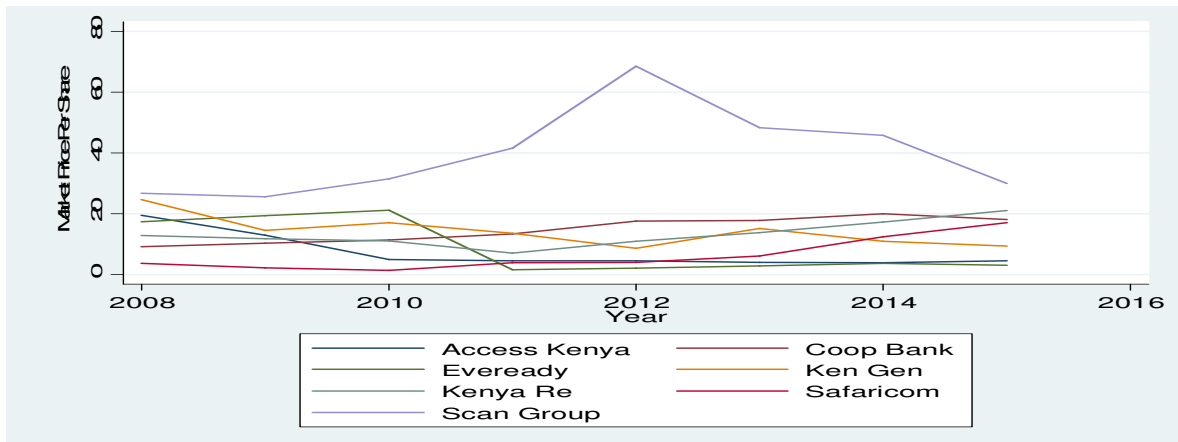
Lastly Scan group the price was high on 1st year which was followed by a sharp decline in the 2nd year and thereafter there was consistent growth in the following years but started declining from 6th year.



Overlain Plots for Dependent Variable

The overlain plots help to explain if there are significant differences between firms, and if the firms have different y-intercepts. The pictorial presentation in Figure 4.2 showed that there were changing slopes on share price patterns among the firms.

FIGURE 4.2
Overlain Share Price



4.3 Diagnostic Tests

Upon undertaking the exploratory analysis, we carry out a panel data diagnostic tests. This is to help us examine whether the error terms were serially correlated, choose between pooled, random and pooled effects model. It will also help determine if the variables are biased.

4.3.1 Heteroskedasticity and Serial Correlation test

To test for heteroskedasticity, we run a Breusch –Pagan CW test whose null hypothesis is that there is a constant variance. The results are as shown by Table 4.1 below. With the p-value less than 0.05, we conclude that the data is heteroskedastic.

Both heteroskedasticity and serial correlation tests were summarised as shown in Table 4.1. Heteroskedasticity was tested using Breusch –Pagan CW Test for heteroskedasticity whose results showed that there was no uniform variance since the P values were less than 0.05 therefore robust standard errors should be used to eliminate biasness. In addition, there was no evidence for serial correlation among the panels (p value > 0.05).

TABLE 4.1
Result for Heteroskedasticity and Serial Correlation Test

Dependent variable	Test for heteroskedasticity		Serial Correlation	
	χ^2 -value	p-value	F-value	p-value
MPS	22.39	0.0000	1.586	0.2150

4.3.2 Determination of the Regression Model between pooled, fixed and random effects model

Results in Table 4.2 below, presents the results of the Breusch –Pagan LM Test to determine if the pooled OLS model is appropriate. Since the p value was less than 0.05, we determine that the pooled OLS model wasn't appropriate.

TABLE 4.2
Breusch –Pagan LM Test for Random effects

Model	Dependent variable	χ^2 -value	p-value
1	MPS	78.15	0.0000

Results in Table 4.3 shows the test results for time fixed effects, random effects and pooled effects model. The study found it necessary to examine the most appropriate model between RE and FE. To achieve this Hausman test was applied. Results in Table 4.3 revealed that the most appropriate model to fit was random effect since the p value > 0.05.

TABLE 4.3

Test Results for Fixed Effects and Random Effects model

Dependent variable	Fixed Effect		Random effects		Hausman test	
	F- value	p-value	Wald Chi2(4)	p-value	χ^2 -value	p-value
MPS	12.27	0.0000	49.76	0.0000	6.52	0.1632

4.4.1 Panel Data Descriptive Analysis

Results in Table 4.4 shows' the descriptive pattern for the variables, market price per share, dividend per share, earnings per share, liquidity and size of the panel under study. We observe that the average market price per share for the panel was 13.39375 with a standard deviation of 12.19. The average dividend paid is 0.35875 with a standard deviation of 0.21. The average earning per share in the panel was 1.234286 with a standard deviation of 0.83. Liquidity as measured using the current assets had an average of 1.892065 with standard deviation of 0.67. Finally, the size of the firms as measured by their asset base was an average of 65.4 million with standard deviation of 81.1 million. A close scrutiny of the results revealed that there were minimal variations on the three variables measuring dependent variable in the period under examination.

TABLE 4.4

Descriptive Statistics for the variables

Variable,		Mean	Std. Dev.
MPS	overall	13.39375	12.19
	between		12.12
	within		4.51
DPS	overall	0.35875	0.21
	between		0.18
	within		0.16
EPS	overall	1.234286	0.83
	between		0.73
	within		0.48

Liquidity	overall	1.892065	0.67
	between		0.47
	within		0.51
Size	overall	6.54e+07	8.11e+07
	between		7.82e+07
	within		352 e+07

4.4.2 Panel Data Regression Analysis

Since Hausman test showed the preference for random effects panel regression modeling on market price per share, it was fitted and the results were tabulated as in Table 4.5. We run a random effects GLS regression and obtain the following results:

TABLE 4.5

```
. xtreg MPS DPS EPS Liquidity Size, re

Random-effects GLS regression           Number of obs   =           56
Group variable: FirmID                 Number of groups =            7

R-sq:  within = 0.5119                  Obs per group: min =            8
      between = 0.3709                  avg =           8.0
      overall = 0.3854                  max =            8

corr(u_i, X) = 0 (assumed)              Wald chi2(4)    =           49.76
                                           Prob > chi2     =           0.0000
```

MPS	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
DPS	12.06281	5.265722	2.29	0.022	1.742187	22.38344
EPS	4.424851	1.238439	3.57	0.000	1.997555	6.852147
Liquidity	2.840855	1.120231	2.54	0.011	.6452418	5.036468
Size	6.653583	2.358042	2.82	0.005	2.031906	11.27526
_cons	-50.37812	18.06182	-2.79	0.005	-85.77863	-14.97761
sigma_u	9.3148252					
sigma_e	3.4487848					
rho	.87944348	(fraction of variance due to u_i)				

From Table above, the resultant regression equation becomes:

$$Y = -50.38 + 12.06X_1 + 4.42X_2 + 2.84X_3 + 6.65X_4$$

Where, Y = Share Price; X₁ = DPS; X₂ = EPS; X₃ = Liquidity and X₄ = Size of the Firm

The model goodness of fit was tested using the coefficient of determination which showed that 38.54% variation on market price per share (MPS) was explained by DPS, EPS, Liquidity and size when combined. All the independent variables had a significant joint effect since the Wald Chi2 (4) statistics was 49.76 and p value <0.05. Effects specification statistics revealed that there was a strong relationship in the cross sectional error term (Rho = 0.8794) and there was minimal deviation across the error term as indicated by standard deviation of 3.4488.

From the findings, when all the variables are held constant, the share prices would be at -50.38.

Also the results showed that there was a positive and significant relationship between DPS and MPS. This implies that, holding other factors constant, a unit increase in DPS increased the MPS by 12.06

It can be also deduced that earnings per share of a company is significant since its p-value <0.05. We observe that a unit increase in earnings per share will increase the market price per share by 4.42 while holding other factors constant.

We also observe a positive and significant relationship between market price per share and the liquidity of the firms. A unit increase in liquidity results in 2.84 increases in market price while holding other factors constant. This can be attributed to the ability of the firm to pay dividends as well as other liabilities as and when they fall due.

Finally, we observe a positive and significant relationship between market price per share and firm size. This implies that a unit increase in a firm size would result in an increase in the share price by 6.65 while holding other factors constant.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the research findings. There is also the conclusion of the study based on the main findings. The chapter also presents the recommendations of the study that are relevant to policy makers, theory and practice. There are also the recommendations for further studies that open room for future scholars and academicians in their quest of adding more knowledge to the existing one.

5.2 Summary of the Findings and Discussion

The study objective was to determine the factors influencing stock market prices of companies listed at NSE after IPO's in Kenya. To achieve this, the study aimed at responding to the study questions: What is the effect of EPS on stock market prices of companies listed at NSE after IPO's in Kenya? How does Dividend Policy of the firm influence stock market prices of companies listed at NSE after IPO's in Kenya? How does Liquidity of a firm influence stock market prices of companies listed at NSE after IPO's in Kenya? What is the Size of a firm on stock market prices of companies listed at NSE after IPO's in Kenya?

The study collected secondary data relating to the company namely MPS, EPS, and DPS, Current assets, current liabilities and total assets. This set of data was acquired from published annual reports and financial statements of the seven companies for eight years of trading after IPO, industry analysis, websites, and internet. Random effects were used to test the study hypothesis. Market price per share was the dependent variable while dividend per share, earnings per share, liquidity and Firm size were the dependent variables. Natural logarithm to base ten was used to transform the firm size data variables.

5.2.1 Dividend per share and share price

The results of the study revealed that there was a positive relationship between dividend per share and share price. The findings agree with Hulori (2013) who found a positive significant relationship between dividend per share and share price. These results were also in agreement with Mensa and Talisis (2012) who found a positive relationship

between dividend per share and share price. Moreover, the results have contrasted the findings by Geati (2014) who found a negative and insignificant relationship between dividend per share and share price. It can be implied that the listed manufacturing firms share price are affected by the dividend per share. There is therefore need for the firms listed in Nairobi securities exchange to highly consider their dividend policy as it affects the shareholders' wealth.

5.2.2 Earnings per share and share price

There was a positive relationship between earnings per share and the firms share price. These findings were in agreement with Hastings (2008) who argued that a firms' profitability as measured by earnings per share influence share positively. From the findings it can be implied that companies' financial performance in terms of profitability improves the shareholders' wealth in the stock market.

The firm's investment in long term projects that assures increased profitability of the firm should therefore be evaluated to ensure that there are positive net present value and thus profitability which will thence lead to better market prices.

5.2.3 Liquidity and share price

There was a positive relationship between the firm share price and liquidity of the firms. These findings were in agreement with Maina and Kiniti (2013) who found a positive relationship between liquidity and share price among the companies which were listed in NSE. In addition, there were in agreement with Azeez and Latifat (2013) and Ajanthjan (2013) who found that the current ratio had a positive and significant relationship with listed company's performance. However, the findings contrasted Sharma and Panigrahi (2013) who found an inverse significant relationship between working capital and firm performance. It also contrasted the recommendations of Azam and Haider (2011) who recommended that the management ought to devise measures to reduce the cash conversion cycle and consequently increase the shareholders' value. All listed companies should examine their working capital and look for means to make it more efficient as such to increase the benefits associated with it in relation to firm performance. There is need to hasten the debtor repayment period and improve inventory management strategies and evaluate on the ways of benefiting from extended credit period.

There is need to evaluate the liquidity ratios of the firms as well as the composition of the current assets and current liabilities.

5.2.4 Firm size and share price

Finally, we observe a positive relationship between firms share price and the firm size. This agrees with Heshmati and Loof (2008) who argued that asset acquisition influence share price positively though it can minimize the annual profit levels in a company due to increase in annual expenses which are related to the specific investment. From the findings it can be implied there are benefits on share price upon firm size though these benefits are not fully beneficial to the shareholders since short term profitability may be negatively impacted.

The amount of capital expenditure per annum should be evaluated to ensure that there are maximum benefits and only those projects which are having positive net present value are invested in. More so the management should examine the investment policy to ensure that there are profitable to operate and the maintenance costs are within the set levels.

5.3 Conclusion of the Study

The study finding concludes and recommends that upon listing of firms on the NSE they should evaluate their dividend policy. The dividend policy adopted by listed companies should be tailored to meet the unique needs of all investors within an organization to maximize investors' confidence. There is need to sensitize investors on how they can benefit through the various dividend payment patterns.

Second, there is need to increase the firms size in capital expenditure per annum so as to assure long term profitability. Although, asset base increased firm's profitability there is need for listed firms to evaluate all projects independently and eliminate those projects whose maintenance costs is so high.

Thirdly, the firms should evaluate the liquidity management decision so as to adopt the optimal working capital cycle. This may include increase in the creditor's period and decrease in the debtors and inventory turnover periods. The management should develop strategies on liquidity management that's specific to the investor's preference.

5.4 Recommendations for Further Studies

The current study focused on the establishing the factors that affect share prices after IPO, the study used secondary data that was gathered from financial reports and annual reports, future studies should use both primary and secondary data. The current study only covered four factors (EPS, DPS, Liquidity and Size) and the analysis was done using STATA statistical packages; therefore, future studies should be carried to cover these other variables that may have significant effect on share prices after IPO for example the macro economic variables like interest rate.

5.5 Limitation of the Study

The study used secondary data as the preferred source of study data. Therefore, the amount of research data collected will be dependent on the extent of data availability in regards to the initial public offers as carried out by the targeted companies.

The study only sought to determine the factors that influence stock market prices of companies listed in NSE after IPO's in Kenya in the short run i.e. the first 8 years of trading. The findings therefore ought not to be generalized to imply the same results over the long run.

REFERENCES

- Aamir, M., Nasir, A., Khan, K., & Qayyum, M. (2011). Can Dividend Decisions Affect the Stock Prices: A Case of Dividend Paying Companies of KSE, Euro Journals Publishing, Inc., *International Research Journal of Finance and Economics* 76(1).
- Abraham R. & Harrington C. (2011). Seasoned Equity Offerings: Characteristics of Firms. *International Journal of Business, Humanities and Technology* 1(3).
- Baker, H. K., & Haslem, J. A. (2015). Information needs of individual investors.
- Aduda J. Odera & Onwonga M. (2012), 'The Behaviours & Financial Performance of Individual Investors in the Trading of Shares of Companies listed at the NSE Kenya'. *Journal of Finance & Investment Analysis*, j (3), 33-60
- Ahmed, H., & Javid, A. (2009). Dynamics and Determinants of Dividend Policy in Pakistan: Evidence from Karachi Stock Exchange Non-Financial Firms. *International Journal of Finance and Economics* 2, 148-171.
- Ajanthan, A. (2013). The Relationship Between Dividend Payout and Firm Profitability: A Study of Listed Hotels and Restaurant Companies in Sri Lanka. *International Journal of Scientific and Research Publications*, 3(5), 1-6.
- Akbar, M., & Baig, H. (2010). Reaction of Stock Prices to Dividend announcements and Market Efficiency in Pakistan. *The Lahore Journal of Economics*, 15 (1), 103 - 125.
- Kalama, D. J. (2013). *The relationship between earnings and share prices of firms listed at the Nairobi Securities Exchange* (Doctoral dissertation, University of Nairobi).
- Christiano, L., Ilut, C. L., Motto, R., & Rostagno, M. (2010). *Monetary policy and stock market booms* (No. w16402). National Bureau of Economic Research.
- Schnabl, P. (2012). The international transmission of bank liquidity shocks: Evidence from an emerging market. *The Journal of Finance*, 67(3), 897-932.
- Fama, E. F., & French, K. R. (2012). Size, value, and momentum in international stock returns. *Journal of financial economics*, 105(3), 457-472.
- Masum, A. A. (2014). Dividend policy and its impact on stock price—A study on commercial banks listed in Dhaka stock exchange.
- Bailey, S., A. (2005). *Investigating the Link Between Financial Dollarization and Inflation: Evidence from Jamaica. Working Paper*, Bank of Jamaica.
- Beatty., R. & J. Ritter, (2014). Investment Banking, Reputation, and the Under pricing of Initial Public Offerings. *Journal of Financial Economics* 15, 1986, 213-232.
- Bruce, A. A. (2014). IPO Stocks Performance Imperfection: A Review of Models and Empirical Works. *American Journal of Industrial and Business Management*, 2014.

- Chibeka, D. O. (2014). *The effect of initial public offering pricing on the long run stock returns of companies listed at the Nairobi Securities Exchange* (Doctoral dissertation, University of Nairobi).
- CMA. (2015). Capital Market Master Plan (the “Master Plan”) 2014-2023.
- Faruque, M., U. (2011). An Empirical Investigation of the Arbitrage Pricing Theory in a Frontier Stock Market: Evidence from Bangladesh.
- Gitere, P., M. (2014). *The Relationship Between Dividend Pay-out Ratio and Value of Shares of Firms Listed at The Nairobi Securities Exchange* (Doctoral dissertation, University of Nairobi).
- Jecheche, P. (2012). An Empirical Investigation of Arbitrage Pricing Theory: A case Zimbabwe. *Research in Business and Economics Journal*, 6, 1.
- Karethio, E. N. (2013). *The effect of Dividend Payout Ratio on Financial Performance of Companies Listed at the Nairobi Securities Exchange* (Doctoral Dissertation, University of Nairobi).
- Kiluku, L. M. (2014). *The Relationship Between Initial Public Offer Price and the Post Listing Market Price at the Nairobi Securities Exchange for Listed State Owned Enterprises* (Doctoral Dissertation, University of Nairobi).
- Kipngetch, T. J., Kibet, B. J., Guyo, S. A., & Kipkoskey, B. J. (2011). Determinants of Initial Public Offer Pricing in Kenya. *The Centre for Innovations in Business and Management Practice*.
- Loderer, C. F., & Waelchli, U. (2010). Firm Age and Performance. Available at SSRN 1342248.
- Mahmood, f., Xia, X., M., Usman & Shahid h. (2011). How Asian and Global Economic crises prevail in Chinese IPO and Stock Market Efficiency. *International Business Research*, 4(2), pp. 226-238
- Masum, A. A. (2014). Dividend policy and its impact on stock price—A study on commercial banks listed in Dhaka stock exchange.
- .Mugenda, O., & Mugenda, A. (2003). Research Methods: Quantitative and Qualitative methods. *Nairobi, Rev editions*.
- Muli, B. M. (2014). *The Effect of Initial Public Offering on Long Run Stock Price Performance of Companies Listed at the Nairobi securities Exchange* (Doctoral Dissertation, University of Nairobi).
- Murekefu, M., T., & Ouma, P., O. (2012). The Relationship Between Dividend Payout and Firm Performance. *European Scientific Journal*, 8 (9), 199-215.
- Murugesu, T. (2013). Impact of Earning Per Share (EPS) On Share Price (Listed Manufacturing Companies in Sri Lanka).
- Musyoki, D. (2012). Changes in Share Prices as a Predictor of Accounting Earnings for Financial Firms Listed in Nairobi Securities Exchange. *International Journal of Business and Public Management*, 2(2), 1-11.
- Mutai, B., (2014). The Relationship that Exists Between Stock Prices at the Nairobi Securities Exchange and Various Kenya's Macroeconomic Variables. Unpublished Master's Thesis, University of Nairobi.

- Mutisya, B., M. (2014). *The Relationship Between Dividend Payout and Financial Performance of Firms Listed at the Nairobi Securities Exchange* (Doctoral Dissertation, University of Nairobi).
- Mutwiri, W., T. (2014). *The Effect of Dividend Payout Ratio on Share Prices of Non-Financial Firms Quoted on the Nairobi Securities Exchange* (Doctoral Dissertation, University of Nairobi).
- Nazir, M., S., Nawaz, M., M., Anwar, W., & Ahmed, F. (2010). Determinants of Stock Price Volatility in Karachi Stock Exchange: The Mediating Role of Corporate Dividend Policy.
- Ndiege, C., O. (2012). *Factors Influencing Investment Decision in Equity Stocks at the Nairobi Securities Exchange Among Teachers in Kisumu Municipality, Kenya* (Doctoral Dissertation).
- Neneh, B. N., & Vanzyl, J. (2014). Growth Intention and its Impact on Business Growth Amongst SMEs in South Africa. *Mediterranean Journal of Social Sciences*, 5(20), 172.
- Ng'ang'a, K. (2014). *The Relationship Between Dividends and Firm's Performance: A Case Study of Listed Firms in the Nairobi Securities Exchange for the Period 2006-2012* (Doctoral dissertation, United States International University-Africa).
- NSE (2015). Annual Reports (various issues). Website & Handbooks.
- Odongo, A. O. (2012). *Mispricing and Long Run Performance of IPOs at the Nairobi Securities Exchange (NSE)* (Doctoral Dissertation, University of Nairobi).
- Olweny, T. (2012). Dividend Announcement and Firm Value: A Test of Semi Strong Form of Efficiency at the Nairobi Stock Exchange. *Asian Social Science*, 8(1), 161.
- Olweny, T., O., & Kimani, D. (2011). Stock Market Performance and Economic Growth: Empirical Evidence from Kenya Using Causality Test Approach. *Advances in Management & Applied Economics*, 1(3), 153-196.
- Onagoruwa, O. (2006). Analysis Propose Antidotes to Down Trend in the Market. *Stock Watch*, 1(4):.3-8.
- Rahman, M., L., & Uddin, J. (2009). Dynamic Relationship Between Stock Prices and Exchange Rates: Evidence from Three South Asian Countries. *International Business Research*, 2(2), 167.
- Ratib, M., R. (2014). Effects of Bonus Share Issues on Stock Returns of Firms Listed at the Nairobi Securities Exchange. Unpublished Master's Thesis, University of Nairobi.
- Rock, K. (2005). Why New Issues Are Underpriced, *Journal of Financial Economics* 15, 1986, 87-212.
- Sahoo, S., & Rajib, P. (2010). After Market Pricing Performance of Initial Public Offerings (IPOs): Indian IPO Market 2002–2006. *Vikalpa*, 35(4), 27-44.
- Scholtens, B., & Wensveen, V., D. (2003). The Theory of Financial Intermediation: An Essay on What It Does (not) Explain. *Chapters in SUERF Studies*, 7-53.

- Tsangarakis, N.V. (2004). The Price Performance of IPO in Greece. *Managerial Finance*, 30(10), 26-44
- Vincent O., Ongore & G., B., Kusa (2013). Determinant of Financial Performance of Commercial Banks in Kenya, 3(1), 237-252
- Wahome., M. (2008), Eveready: The Sickman of Kenya, In the Weekly Business Magazine.
- Wairia, K.D. (2010). Long-run performance of IPO: Evidence from NSE, unpublished MBA project. University of Nairobi
- Waweru, J., M. (2010). Reaction of Share Prices to Issue of IPOs from the NSE: Empirical Evidence. Unpublished MBA Project, University of Nairobi.
- Waweru, N., N. (2013). *Analysis of the determinants of stock price volatility at Nairobi Securities Exchange* (Doctoral dissertation, University of Nairobi).
- Welch, I. (2012). Seasoned Offerings, Imitation Costs, and the Underpricing of Initial Public Offerings. *Journal of Finance*, 44 (1989), 421-449.

APPENDICES

Appendix I: Initial Public Offers Kenya (IPOs) 2006-2015

Company	Shares on Issues	Type of Issue	Year of Issue	Issue Price	Sum Raised	Subscription Level
	Ord. Shares		Year/ Month	Kshs.	Kshs.	%
KenGen	658,900,000	IPO	2006 April	11.90	7,840,910,000	333%
Scangroup	69,000,000	IPO	2006 June	10.45	721,050,000	620%
Eveready	63,000,000	IPO	2006 Aug	9.50	598,500,000	830%
Access Kenya	80,000,000	IPO	2007 Mar	10.00	800,000,000	363%
Kenya Re	240,000,000	IPO	2007 July	9.50	2,280,000,000	334%
Safaricom	10,000,000,000	IPO	2008 June	5.00	50,000,000,000	532%
Co-op Bank	701,000,000	IPO	2008 Oct	9.50	5,400,000,000	81%
British-American	660,000,000	IPO	2011 Sept	9.00	3,515,103,000	60%
NSE	66,000,000	IPO	2014 July	9.50		763.9%

Appendix II: Work Plan

No.	Item	Month				
		JAN JUN	- JULY	AUG	SEPT	OCT
1	Proposal writing					
2	Presentation of proposal to the board of examiners					
3	Carrying out field survey					
4	Data processing and analysis					
5	Project write-up					
6	Project defense					
7	Submission of the project for examination					

Appendix III: Budget

NO.	DESCRIPTION	AMOUNT (Kshs)
1.	Proposal writing @ 20/= per page	5,000.00
2.	Stationery e.g. paper, pens and staples	3,000.00
3.	Data collection (preparation of questionnaire etc)	8,000.00
4.	Travels	7,000.00
5.	Data analysis	3,500.00
6.	Preparation of final report and binding (about 5 copies)	6,000.00
7.	Contingencies	3,000.00
	TOTAL	35,500.00

Appendix IV: Data for the Study

Firm	FirmID	Year	Asset Base	Size	CA	CL	Liquidity	EPS	DPS	MPS
Access Kenya	1	2008	2318717	6.365	599,117	547,410	1.0945	0.72	0.3	5.23
Access Kenya	1	2009	2728978	6.436	1,113,827	791,788	1.4067	0.6	0.2	5.1
Access Kenya	1	2010	2415111	6.383	658,142	482,981	1.3627	0.5	0.2	4.93
Access Kenya	1	2011	2265714	6.355	549,671	293,924	1.8701	0.69	0.3	4.41
Access Kenya	1	2012	2265714	6.355	549,671	293,924	1.8701	0.69	0.3	4.41
Access Kenya	1	2013	3542754	6.549	617,632	331,165	1.8650	0.45	0.2	4.01
Access Kenya	1	2014	4134251	6.616	632,154	391,234	1.6158	0.42	0.2	3.79
Access Kenya	1	2015	5321421	6.726	640,012	416,432	1.5369	0.53	0.3	4.49
Coop Bank	2	2008	83486000	7.922	7,053,400	1,648,000	4.2800	0.8	0.1	9.1
Coop Bank	2	2009	110700000	8.044	9,502,200	2,420,000	3.9265	0.85	0.2	10.3
Coop Bank	2	2010	154300000	8.188	13,440,000	5,611,000	2.3953	1.31	0.4	11.3
Coop Bank	2	2011	168300000	8.226	14,740,000	5,714,000	2.5796	1.53	0.4	13.3
Coop Bank	2	2012	200600000	8.302	17,120,000	6,171,013	2.7743	1.84	0.5	17.5
Coop Bank	2	2013	231200000	8.364	194,600,000	131,200,000	1.4832	2.2	0.5	17.8
Coop Bank	2	2014	285396067	8.4554	242,518,948	185,396,061	1.3081	2.69	0.50	20.00
Coop Bank	2	2015	342500000	8.535	293,200,000	142,500,000	2.0575	2.31	0.5	18
Eveready	3	2008	837329	5.923	638,114	384,139	1.6612	1.01	0.1	1.73
Eveready	3	2009	997672	5.999	795,254	528,176	1.5057	1.31	0.1	1.93
Eveready	3	2010	958487	5.982	943,397	668,833	1.4105	0.87	0.1	1.82
Eveready	3	2011	10116908	7.005	733,708	658,427	1.1143	0	0	1.6
Eveready	3	2012	1150729	6.061	876,043	695,764	1.2591	0.43	0	2
Eveready	3	2013	941749	5.974	683,971	444,019	1.5404	0.47	0	2.7
Eveready	3	2014	930057	5.969	763,357	572,293	1.3339	0.51	0	3.65
Eveready	3	2015	1511665	6.179	640,620	651,306	0.9836	0.48	0	3.05
Ken Gen	4	2008	99068607	7.996	10,655,138	7,924,944	1.3445	0.9	0.5	18.5
Ken Gen	4	2009	102736136	8.0117	12,748,759	5,867,743	2.1727	0.94	0.50	14.55
Ken Gen	4	2010	143597071	8.1571	12,849,414	5,969,815	2.1524	1.49	0.50	17.10
Ken Gen	4	2011	149700000	8.175	19,539,034	11,256,593	1.7358	0.85	0.5	13.6
Ken Gen	4	2012	148100000	8.171	22,288,066	15,000,957	1.4858	0.28	0.5	12.6
Ken Gen	4	2013	171000000	8.233	25,127,810	17,672,629	1.4218	2.39	0.5	15.2
Ken Gen	4	2014	225000000	8.352	27,630,643	25,196,229	1.0966	1.29	0.5	10.9
Ken Gen	4	2015	117784821	8.0711	21,368,973	22,473,517	1.0517	1.24	0.50	9.25
Kenya Re	5	2008	13665599	7.136	22,436,120	8,003,887	2.8032	1.47	0.5	12.8
Kenya Re	5	2009	15000633	7.176	32,341,220	9,099,925	3.5540	1.21	0.5	11.7
Kenya Re	5	2010	17240929	7.237	23,242,340	10,573,502	2.1982	1.17	0.5	11.1
Kenya Re	5	2011	19046441	7.28	24,320,910	11,526,485	2.1100	1.19	0.4	10
Kenya Re	5	2012	23173248	7.3650	20,732,580	9,208,421	2.2515	2.00	0.50	10.85
Kenya Re	5	2013	27628311	7.4414	20,283,110	10,634,683	1.9073	2.19	0.50	13.80
Kenya Re	5	2014	32174251	7.5075	20,744,510	12,182,847	1.7028	2.48	0.70	17.20
Kenya Re	5	2015	35572195	7.5511	222,722,950	137,596,961	1.6187	2.91	0.75	21.00
Safaricom	6	2008	49122593	7.6913	25,243,720	12,887,438	1.9588	0.35	0.05	3.60

Safaricom	6	2009	55921660	7.7476	35,760,664	17,502,526	2.0432	0.26	0.05	2.10
Safaricom	6	2010	70300880	7.8470	33,819,970	22,570,645	1.4984	0.20	0.05	1.32
Safaricom	6	2011	79737036	7.9017	34,117,726	21,701,296	1.5722	0.32	0.10	3.80
Safaricom	6	2012	84283777	7.9257	37,715,900	21,194,195	1.7795	0.38	0.22	4.00
Safaricom	6	2013	92265128	7.9650	36,591,029	25,356,024	1.4431	0.44	0.31	6.00
Safaricom	6	2014	96338359	7.9838	38,262,587	28,321,463	1.3510	0.57	0.47	12.35
Safaricom	6	2015	104767293	8.0202	52,190,333	32,590,553	1.6014	0.80	0.64	17.05
Scan Group	7	2008	3773957	6.5768	3,593,824	1,690,428	2.1260	1.79	0.50	26.75
Scan Group	7	2009	3933148	6.5947	3,213,445	1,555,306	2.0661	1.81	0.50	25.50
Scan Group	7	2010	8009431	6.9036	7,117,892	4,240,483	1.6786	2.13	0.70	31.50
Scan Group	7	2011	8489938	6.9289	7,778,587	3,797,599	2.0483	3.20	0.70	41.50
Scan Group	7	2012	8361646	6.9223	7,349,622	3,261,174	2.2537	3.25	0.60	48.50
Scan Group	7	2013	12744583	7.1053	10,459,622	4,259,750	2.4555	2.19	0.40	48.25
Scan Group	7	2014	13284104	7.1233	1,092,315	440,009	2.4825	2.16	0.50	45.75
Scan Group	7	2015	12468479	7.0958	10,136,904	3,678,463	2.7557	2.06	0.50	40.00